





# LIBRARY

Brigham Young University

From

Call No. *910.7*  
*R84*

Acc. No. *36495*

8.2

Date Due

Mr 5





# INDUSTRIES AND TRADE WHICH BIND NATIONS TOGETHER

Part I: The Great  
Industrial Nations

Library  
Brigham Young University

From .....

Call No.

910.7

Acc. No.

36495

R84

3  
The Social Science Pamphlets

General Course in History, Geography and Civics for  
Grades VII, VIII, and IX

Organized Under the Direction of

HAROLD RUGG

in The Lincoln School of Teachers College

Copyright 1923, by HAROLD RUGG, EARLE RUGG and EMMA SCHWEPPE  
*The reproduction of these materials is expressly prohibited*



THE SECOND  
EXPERIMENTAL EDITION  
1923-1926

PREPARED BY THE COLLABORATION OF

HAROLD RUGG  
ELIZABETH G. WOODS  
EMMA SCHWEPPE  
JOHN A. HOCKETT

BRIGHAM YOUNG UNIVERSITY  
LIBRARY  
PROVOSTIAN

THE FIRST  
EXPERIMENTAL EDITION  
1921-1923

PREPARED BY THE COOPERATION OF

HAROLD RUGG  
EARLE RUGG  
EMMA SCHWEPPE  
MARIE GULBRANSEN

---

*Editorial Assistant, FRANCES M. FOSTER, 1923-*

*Research Associates*

EARLE RUGG, 1921-23  
JOHN A. HOCKETT, 1924-  
JOHN N. WASHBURN, 1925-  
H. MELTZER, 1924-25  
C. O. MATHEWS, 1925-  
B. R. SHOWALTER, 1924-25  
NEIL BILLINGS, 1924-  
BERTHA M. RUGG, 1923-



THOSE who are engaged in the making of these materials of instruction believe that the future of representative democracy in America depends upon the intelligence of the common man. They believe that the known facts of intelligence are worthy of the hypothesis that there is in the group mind sufficient capacity to express its will effectively through industrial, social, and political machinery. This means that potential capacity must be transformed into dynamic ability. They are equally confident that, although America has practised universal education on a scale never before attempted by a large nation, our instruction has fallen far short of preparing the rank and file for the intelligent operation of democratic government.

After more than a century of democracy, there are signs of serious import that we are facing a near impasse in citizenship. The impasse, if such it is, is undoubtedly the natural outgrowth of our spectacular conquest of vast material wealth; of our reception into the country of thirty-three millions of people of diverse races, nationalities, practices, and beliefs, and of the massing of human beings in cities at a rate of which we had hitherto not dreamed. The present crisis has been brought about in large part by the mushroom growth of a fragile and highly specialized mechanism of industry, transportation, communication, and credit. With these stupendous material advances, resulting in the artificial inflation of our economic and social standards of living, there has not been a parallel aesthetic, spiritual, and cultural growth.

To relieve this impasse, we must substitute critical judgment for impulsive response as the basis for deciding our social and political issues. The thoroughgoing reconstruction of the school curriculum is a necessary first step in the process, for the reason that the public school is our most potent agency for social regeneration. Especially through the curriculum in the social sciences must we subject our youth to a daily regimen of deliberation and critical thought. Only those who have been trained through years of practice in the analysis of facts, in the making of decisions, the drawing of inferences and conclusions, will resort to intelligence instead of to predisposition as their guide for conduct.

## THE SOCIAL SCIENCE PAMPHLETS: AN ANNOUNCEMENT

This is one of the Social Science Pamphlets for school grades VII, VIII, and IX. The series comprises a general course in the social studies—history, geography and civics. The content represented was taught in mimeographed form in three grades of the Lincoln School of Teachers College, 1920-1922. Since 1921, the authors have carried on curriculum investigations seeking to validate the content of this social science course. The results of these investigations have been assembled in twelve books which have been used experimentally in trial editions by more than one hundred school systems. The purpose of these editions is to determine by measured experimentation the grade placement and teaching arrangement of the material.

As a result of their co-operative use in public schools during 1922-1923, 1923-1924, 1924-1925, 1925-1926, the pamphlets have been printed in two experimental editions. The research staff is now engaged in the third complete revision of the materials. The complete junior high school social science course in its current experimental edition is available for trial use in co-operating public schools. It will not be available for general commercial distribution until questions of selection, grade placement, and organization are answered by objective investigations which are now under way.

A series of monographs is being published for the Lincoln School by the Bureau of Publications, Teachers College, Columbia University. These monographs report the research by which the materials of this curriculum have been selected and organized.

The following Social Science Pamphlets comprise the series as now organized:

### SEVENTH GRADE PAMPHLETS

1. TOWN AND CITY LIFE IN AMERICA
2. RESOURCES, INDUSTRIES AND CITIES OF AMERICA
3. INDUSTRIES AND TRADE WHICH BIND NATIONS TOGETHER; *Part I*,  
THE GREAT INDUSTRIAL NATIONS
4. INDUSTRIES AND TRADE WHICH BIND NATIONS TOGETHER; *Part II*,  
THE CHANGING AGRICULTURAL NATIONS

*and*

A BOOK OF PRACTICE EXERCISES IN MAP LOCATION  
*for supplementary use*



## EIGHTH GRADE PAMPHLETS

1. THE WESTWARD MOVEMENT AND THE GROWTH OF TRANSPORTATION
2. THE MECHANICAL CONQUEST OF AMERICA
3. AMERICA'S MARCH TOWARD DEMOCRACY, *Part I.*
4. AMERICA'S MARCH TOWARD DEMOCRACY, *Part II.*

## NINTH GRADE PAMPHLETS

1. AMERICA AND HER IMMIGRANTS
  2. PROBLEMS OF AMERICAN INDUSTRY AND BUSINESS
  3. PROBLEMS OF AMERICAN GOVERNMENT
  4. HOW NATIONS LIVE TOGETHER
- 

"THE SOCIAL SCIENCE PAMPHLETS: A Descriptive Statement and Suggestions for Teaching" can be secured without charge upon request.

---

The authors need co-operation and criticism from the public schools. They will welcome inquiries and suggestions about the pamphlets and the experimental work through which they are being constructed.

---

*Address all inquiries to Harold Rugg, The Lincoln School, 425 West 123rd Street, New York, N. Y.*

## TABLE OF CONTENTS

SECTION	PAGE
I     An Old World Which Is Becoming a New World.....	1
II    The Narrow World of the Days Before the Steam Engine.....	36
III   How England Became the Pivot of World Trade and the Center of a Great Empire.....	77
IV    How England Became the Pivot of World Trade and the Center of a Great Empire ( <i>continued</i> ).....	102
V     How England Became the Pivot of World Trade and the Center of a Great Empire ( <i>continued</i> ).....	123
VI    How England Became the Pivot of World Trade and the Center of a Great Empire ( <i>continued</i> ).....	141
VII   France—The Second Empire in the World—Her Favorable Location For Trade .....	179
VIII   How France Became Both Farmer and Manufacturer, 1750-1850.....	189
IX    How, After 1850, France Became One of the World's Leading Industrial Nations .....	208
X     France Built Up the Second Largest Empire in the World, 1850-1919.....	227
XI    Germany, 1870-1914; One of the Greatest Industrial Countries, the Pivot of Europe's Industries and Trade, and the Center of an Empire; 1914- 1924: A Broken Nation Because Its Ties With the Rest of the World Were Broken.....	248
XII   What Would Happen to the United States If She Could Not Trade With Other Countries?.....	294
XIII   We Must Begin Now the Study of Another Topic Than Industries and Trade in the Great Industrial Nations.....	321



## SECTION I.

### AN OLD WORLD WHICH IS BECOMING A NEW WORLD



# A NEW World You Have Never Seen!

A FIRST GLIMPSE OF THE PAMPHLET

Would you like to see something of this world?

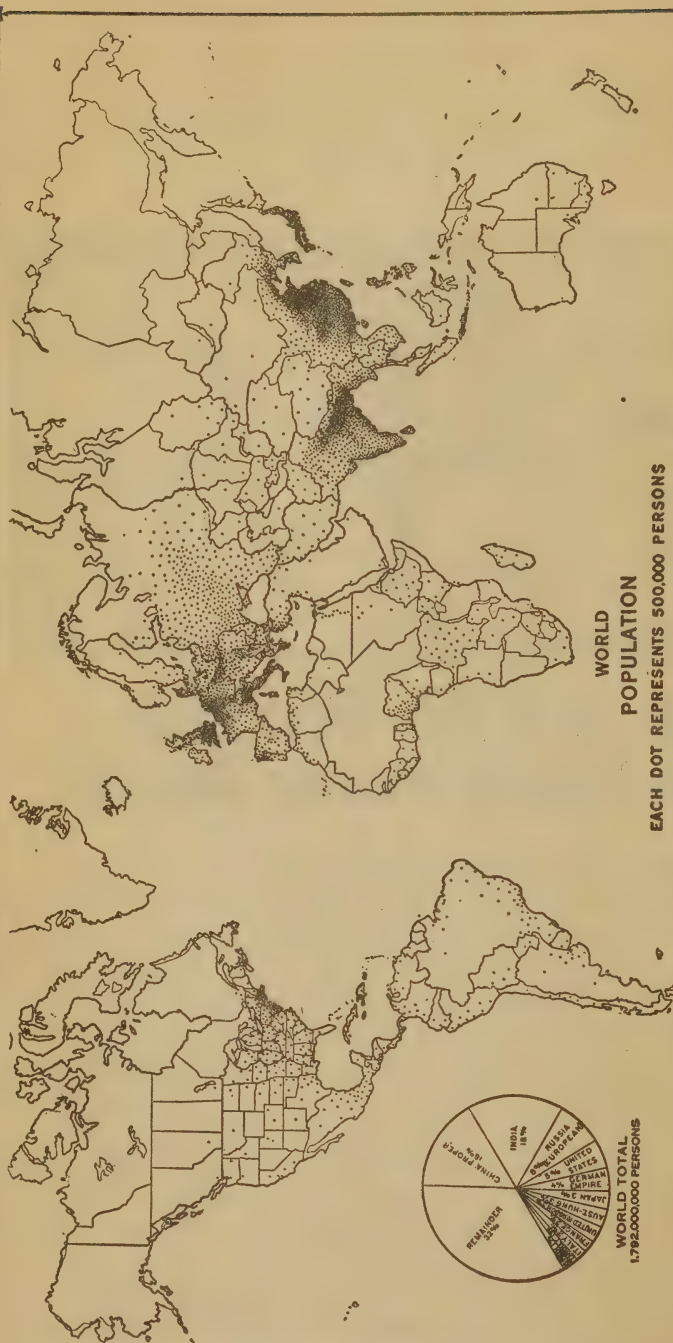
All over the face of the earth—except in the highest parts of the mountains, the hottest dryest regions of the desert, and the coldest regions around the North and South Poles—people are living. There are the houses, the factories, the cities, the bridges, and the railroads which they have built, the fields they have sown, and the pastures on which their flocks graze.

Do you imagine that the people of the earth are living evenly scattered over the lands of the globe?

Are Americans, themselves, evenly scattered over the territory of the United States? No, people are crowded together much more closely in the north-eastern part of our country than in the west and south. In the industrial zone from St. Louis and Chicago through to New York and Boston millions of people herd together in great cities.

So it is with other parts of the world. In some regions people huddle together in towns and cities; in others they live on farms or in villages.

Fig. 1 gives you a picture of the way people crowd together in some regions and scatter out in others.



WORLD POPULATION

FIG. 1 THE BLACKENED PORTIONS OF THE MAP SHOW WHERE PEOPLE LIVE CROWDED TOGETHER. THE WHITER SPACES TELL US THE REGIONS WHERE FEWER PEOPLE LIVE

The five most glaring black spots on the map are China, India, parts of western Europe (British Isles especially), Japan and north-eastern United States. Name the most prominent regions in which fewest people are living.

Finch and Baker: *Geography of the World's Agriculture*, U. S. Dept of Agriculture.

## SOME QUESTIONS ABOUT WHERE PEOPLE LIVE

In which continent do people live most closely together?

In what section of the continent are most of the people of Europe living? of Asia? of Africa? of South America? of North America? of Australia?

As we go on, we shall find out just why so many people live in certain regions and so few in others.

## DO YOU KNOW THE LOCATION OF THE CONTINENTS?

## MAP TEST

*First step:* On a mimeographed map of the world, without consulting another map, letter the names of the continents in the proper places.

*Second Step:* Open your geography to a world map which gives the names of the continents. Study very carefully the location of the continents which you missed. Try to fix each one in your mind with relation to the others. Note its direction and about how far it is from a continent that you know.

*Third step:* Now close your eyes and try to see its position.

*Fourth step:* Open your eyes and see if your mind-picture was right. If not, close your eyes again. See if it is clearer than before. Look again at the map and repeat the process until you are sure you can locate the continent accurately.

*Fifth step:* Close the geography and on the clean mimeographed map write down the name of the continent in its proper place. When you have finished, compare your work with the geography map. If it is incorrect this time, you must go through the whole process again, and again, until you succeed in getting it right.

---

*Important note to the teacher:* This section is merely an introduction to the entire pamphlet and the one which follows it. Have the pupils read it as rapidly as they can merely to enjoy the stories and to get a general impression of living in many lands.

Do NOT analyze the episodes. The subsequent sections of this pamphlet and of the fourth seventh grade pamphlet will supply the needed details.

Have the pupils locate on a world map, as directed, the places referred to in the episodes. Be sure to have them do the exercise at the end of the section to find out what the whole pamphlet is about.



*Sixth step:* Do this for all the continents you missed in your test.

*Seventh step:* Bind the two test maps into your notebook for safe-keeping. In about a week we will repeat this test to see if you can remember all the continents correctly.

### EXERCISE

"HOW MANY PEOPLE ARE THERE IN THE ENTIRE WORLD?"

Miss Jenison asked the boys and girls of her seventh grade class in geography. Jack Fox, always ready with an answer, spoke before a hand went up:

"Ten million."

"Why, Jack," said Betty Raymond, in a chorus of "Ohs" from others in the class, "there are more than 10,000,000 in our New York State alone! What a foolish answer! Miss Jenison, there must be two or three hundred million."

Other answers were given, some as low as Betty's, others as high as ten billion. Miss Jenison wrote them on the board in a table this way:

Number of People in the World.	Number of Pupils Who Gave the Answer
10 million.....	1
200 ".....	4
300 ".....	3
500 ".....	5
700 ".....	2
800 ".....	4
1,000 ".....	8
1,500 ".....	3
1,800 ".....	3
3,000 ".....	2
4,000 ".....	1
6,000 ".....	1
10,000 ".....	1

Which answer is nearest correct according to recent estimates of population? Before you look it up in an atlas or statistical book (like the *New York World Almanac*, the *Chicago Daily News Almanac*, or *The Statesman's Year Book*) try to estimate the population from what you already know about the different countries of the earth. You know the population of the United States. How about Great Britain, France, Germany, Austria, Italy, Russia, China, India, Japan? Add together what you know about the populations of these countries and make up a total estimate.

Now check your answer against the total given in the appendix to this pamphlet.

How near did you come?

---

DO ALL THESE MILLIONS OF PEOPLE WHO ARE SCATTERED  
OVER THE EARTH, LIVE IN THE SAME WAY WE DO?

We need to know more about the people of the world—how they live, how they play, how they travel. Most Americans really know very little about other parts of the world, yet their lives depend a great deal on the way peoples of other races and nations live.

Did you know that there are over a billion people in the world—a thousand million—who have no speedy railway trains to take them about when they wish to travel; who know nothing about cities, and brick and stone apartment houses, automobiles, telephones, paved streets, fine roadways; most of whom never go to school and cannot read or write? It is so.

Most of these people have skins that are different in color from that which we have. We say of them that they belong to different "races." There are four or five hundred million *yellow* people swarming on the eastern coast plains of Asia (on the blackest portions of the map of Fig. 1). There are three or four hundred million more human beings packed together in and about India; their skins are various shades of *brown*. And, although much fewer in number, there are millions of quite *black* people scattered through central Africa. In South and Central America there are people that we speak of as Indians, with skins of a more or less reddish color. Although we do not know how many of these there are we do know that the number of black people and of red people is very much less than the number of yellow and of brown people. In fact, the total number of yellow people and brown people in the world is nearly that of white people—about 800,000,000.

In this pamphlet we shall learn much about the way these various peoples live, and work, and play. As we study further we shall look for two things especially: first, in just what ways these peoples are alike; second, in what ways they are different.

Is it important that you should know? Do their lives have anything to do with your life?

In the last pamphlet we learned how the people of the United States depend upon each other; how one part of the country depends upon another; how the country depends upon the city; how one industry depends upon another industry.

Do you think the same thing is true of all the world?

Are England and Africa, or Germany and France so closely connected as are New-York and Kansas?

These things, too, we shall learn as we study the people of the world and the way they live and work.

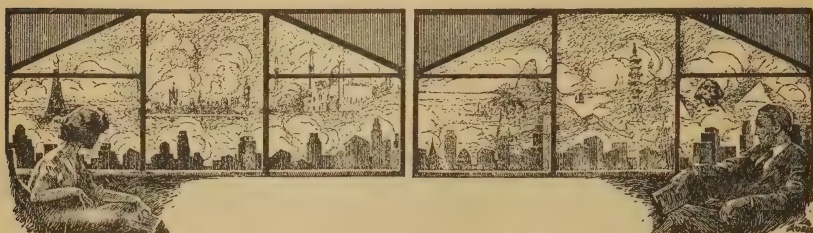


FIG. 2<sup>1</sup>

---

### THE EPISODES OF THIS SECTION GIVE YOU GLIMPSES HERE AND THERE INTO THE LIVES OF MANY DIFFERENT PEOPLES

The life of a poor man in India is different from the life of a working man in London. The life of a child raised in an Arab tent is different from the life of a child on a farm in Norway. And yet these far-off peoples are becoming more and more important to each other, and in some ways more and more alike. This knitting together of different kinds of people is one of the things which is making our world a new world.

Let us look quickly at some of these black, white, and yellow people scattered over the earth, and get just a glimpse of the way they live. In this introductory section we cannot study these thoroughly and, of course, we can take only a few examples. In later sections we shall study some of these peoples very carefully.

#### A MAP FOR YOU TO MAKE AS YOU READ THESE STORIES

You will need a blank outline map of the world. Each story is numbered. As you read the stories about people of various regions make little black circles on the map and print in the numbers of the stories at the places where the people live.

For example, the first story tells about the way the black people travel in the Congo river region in central Africa. Now locate this region on a wall-map in your class room, and mark it plainly on your map by a small

---

<sup>1</sup> From *Our World: Windows on the World*, Houston Publishing Co., N. Y. City



black circle and a "No. 1." The second story tells how the primitive people of this region live, so mark it "No. 2." The third story takes you to Arabia. Locate the region described and letter it "No. 3." Do the same for each of the remaining stories.

Finally, when all of the stories have been read, draw a line connecting the successive circles you have located on your map and by an arrow show the direction which the path of the stories follow around the world.

---

### EPISODE NO. 1

IN THE GREAT DARK CONTINENT OF AFRICA WHERE LIFE  
IS MUCH MORE SIMPLE THAN IS THE LIFE WE KNOW

THE BELGIAN CONGO IN THE HEART OF AFRICA.  
TRAVELLING UP THE CONGO RIVER

LOCATE THE CONGO RIVER ON YOUR MAP  
LETTER IT "NO. 1"

"He who has not travelled with Waganya paddlers does not know what paddlers can do. These fine men will go on for many hours, singing cheerfully and showing no sign of fatigue. Near Sendwe they got me up the rapids, fighting the current inch by inch. To see those stalwart men, every muscle of their bodies at its highest tension, the paddles bending under their efforts forcing the boat upwards, was a sight for every lover of sport and athletic beauty. When we reached the village above the rapids I asked them if they would mind taking me down the rapids in one of their small boats. At first they did not like the idea, pointing out to me how they would get into trouble if I got drowned; but when I gave them a paper acquitting them of all responsibility (these people have still the greatest respect for that mysterious thing, a scrawling) they were satisfied, so we set out. We started slowly, I and four men. Three of them sat behind me, and one stood in front at the bow of the boat. They paddled on slowly and leisurely until we got into the current, then their strokes grew more and more rapid. The speed seemed tremendous to me and was increased more and more. When about four or five hundred yards from the Falls the men jumped up and sang a wild song, the three behind paddled furiously, while the man at the bow stood like a bronze statue, motionless, his paddle in the water and looking in front. I could now no longer see the water distinctly; it looked like a uniform grey sheet, while the very banks of the river seemed to fly by. In front of us there appeared a rock which seemed to bar our way, and, slashing the water with their paddles, the men yelled furiously with excitement. The rock was at a hundred yards, eighty, sixty,

ten . . . . the men in front made a sudden move, round whirled the boat, and I felt, although I could see nothing, that we had passed very close to something, and then we were in smooth water again. I think those seconds were the most glorious of my life, and it came as a revelation to me that these negroes, for whom I had had the contempt that many a civilized man feels towards savages, were giants as compared to me, and from that moment my heart went out to them. I do not mean to say that I was aware of this sentiment at once; all I really felt was the admiration that no man can withhold from the strong and the brave; and as with women pity is often the first step on the path to love, with men admiration leads to sympathy and friendship.”<sup>1</sup>

Perhaps you have paddled up a river, but when you paddle, you paddle for fun—not because that is the only way you can get to your destination. You could go more rapidly by train, automobile, or steamboat, but these modern inventions are rare in the forests and on the rivers of the Belgian Congo!

---

### EPISODE NO. 2.

A STORY OF THE BAMBALA OF THE CONGO—ONE OF THE  
PRIMITIVE TRIBES OF AFRICA—THE WAY THEY LIVE,  
WHAT THEY WEAR, AND WHAT THEY EAT

LETTER THE CONGO REGION No. 2

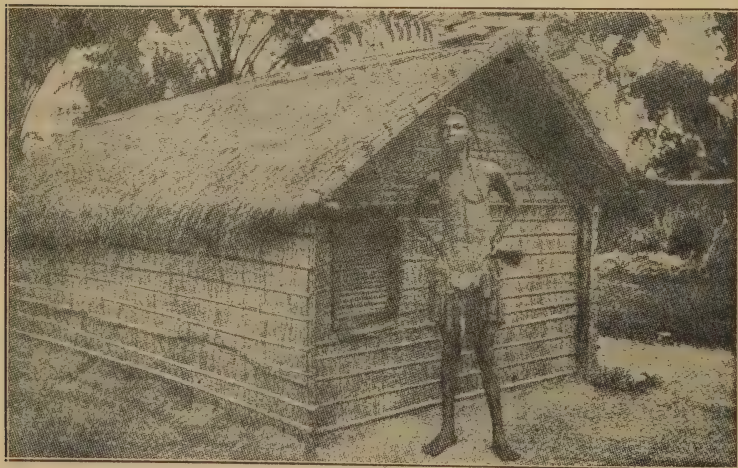


FIG. 3. A BAMBALA HUT<sup>2</sup>

<sup>1</sup> Torday, E.: *Camp and Tramp in African Wilds*; J. B. Lippincott Company; Philadelphia, 1913; pp. 28-29.

<sup>2</sup> Ibid; opp. page 144.

"Both sexes wear practically the same dress—a strip of palm-cloth (*kipussu*), of its natural colour, about a yard in length and half a yard in width, worn round the waist in front and falling to the middle of the hips behind. . . . Men wear skin aprons occasionally on which the hair is left. The garments are sewn with native-made needles (iron) and thread of palm fibre.

"The head is partially shaved, and the bare portion is painted with soot and palm-oil; hair is allowed to grow on the top of the head in the form of a cap, and in old age a piece of palm-cloth, dyed red, may be added to cover a bald head or white hairs; as a special decoration a man who has slain a great enemy wraps the bones of his fingers, etc., in a cloth and wears them on his head; this is called *pungu*, and magical virtue is ascribed to it. . . .

"Numerous ornaments are in use, but though the ears are pierced earrings do not seem to be worn; combs, made of wooden teeth bound together, serve the double purpose of adorning the wearer and providing a means of conveniently scratching the head. Brass bracelets are imported from Europe in great numbers, and men sometimes wear iron bracelets made in the country. . . . Imported rings are worn not only upon the fingers, but upon the great toe, and beads are also worn by both sexes. . . .

"In addition the body is painted red. . . . In the case of mourners, soot is used by the men and brown clay by the women.

The ordinary food consists of *manioc* flour made into a paste with water and boiled. The leaves of the plant are also eaten prepared with palm-oil and pepper. Animal food is not limited to goats, pigs, and other domestic small fry, for, frogs excepted, everything helps to make a stew, from ants and grasshoppers upwards to man. Human flesh is, of course, a special delicacy, and its use is forbidden to women, though they do not disdain to indulge secretly. Other tid-bits are a thick worm found in palm trees, locusts, rats, and blood boiled with *cassáva* flour. Human flesh is not the only food forbidden to women; they may not eat goat's flesh, hawks, vultures, small birds, snakes, animals hunted with weapons, crows, or parrots; to the rule against flesh killed with weapons there are two exceptions—the antelope and a small rat.

"Rich people, who can indulge in luxuries, eat kola nuts in great numbers; a kind of native pepper is known; oil is obtained from the palm-nut, rarely from the ground-nut. But the chief condiment is salt, which is made of the ashes of water plants; there is, however, a strong preference for the imported salt, which is in crystalline form as a rule; the crystals are perforated and strung on a string which is dipped into the food-pot. On a journey salt is eaten as a stimulant and salt water is also drunk. Earth-eating is by no means uncommon, and it is said to be good for stomach-ache."<sup>1</sup>

<sup>1</sup> Ibid; pp. 78-83.



## EPISODE NO. 3.

IN THE LARGEST CONTINENT—ASIA—THE ARABS LIVE STILL  
A DIFFERENT KIND OF LIFE. SOME OF THE ARABS  
ARE NOMADS, ROVING WITH THEIR HERDS, WHILE  
OTHERS HAVE SETTLED DOWN IN TOWNS

In the deserts of Arabia and in the more fertile valleys of the Tigris and the Euphrates lives the Arabs. (Look on the wall map of western Asia for Arabia, and the Tigris and Euphrates rivers.) In the deserts they live a roving life, moving here and there with their families, and horses, and camels, and cattle, living in tents and traveling on horseback.

"In harmony with the red-brown wilderness in which they were framed were these sunny rovers of the desert. Their long brown camel-hair cloaks,



FIG. 4. THE ARABIAN DESERT<sup>1</sup>

the dusty sun-burnt kerchiefs which enveloped head, face, and neck, and the bay colored, neat limbed steeds, almost identified themselves with the stubborn and flowerless shrubs and the time-worn rocks of the plain itself. The tasselled spear first proclaimed in the distance the real character of such specks on the monotonous waste."<sup>2</sup>

Many of the Arabs who once wandered over the desert have settled in towns and villages of Mesopotamia, along the Tigris and Euphrates rivers.

There, in ancient cities whose history goes back thousands of years, they live a life much more peaceful and quiet than life in a city in our country. At the same time their life is very different from the primitive life of the natives in central Africa.

<sup>1</sup> *Asia*; New York; Vol. XXII; April, 1922; page 265.

<sup>2</sup> Ainsworth, William Francis: *A Personal Narrative of the Euphrates Expedition*; Vol. 1; Kegan Paul French and Co., London; 1888; page 385.

MOSUL—WHICH LONG AGO WAS CALLED NINEVEH—  
IS AN ARAB CITY

LOCATE MOSUL ON YOUR MAP; LETTER IT NO. 3

Mosul is quite a large city of perhaps 80,000 people. Most of them are Arabs who settled down in the city, and yet have continued in many ways to live as they did in the desert.

The houses are built of irregular blocks of stone and are covered with white stucco. Most of the roofs are flat, but some of them are domed.

"The streets are narrow and aimless, forming a perfect maze of tangled lanes. As there is no system of sewage whatever, they serve as repositories



FIG. 5. IN AN ARAB TENT<sup>1</sup>

for all the filth of the houses that border on them. They are rarely so wide that more than two men can walk abreast and the stench in the narrow sun-traps is well-nigh unbearable at times. Sun-traps they are because of the white walls and white dust that reflect the sun's rays intensely. . . Flies breed in the open refuse heaps in astonishing numbers. These insects, which we are learning to abhor in western countries, are rather petted here and swarm over everything. . . .

"Despite the filth outside, the houses, which turn a blank wall to the streets, are very picturesque. . . The court is surrounded by a colonnade fronting both the upper and lower stories. The lower story has the sanctum on one side, the servant's quarters on another, and on the others *serdabs*, the heavy basements whither the family retire in hot weather. The ordinary living-rooms open up on the upper gallery, with doors and

<sup>1</sup> Fowle, Captain T. C. *Travels in the Middle East*; Smith, Elder & Co., London, 1916; opp. p. 40.

windows fitted with stone lintels carved with arabesques. The roof above is an excellent vantage ground from which to shoot at one's enemy in the street below, and affords a comfortable sleeping place in hot weather, when the upper rooms are scorching with the heat stored up during the day in the porous walls."<sup>1</sup>

"The bazaars of Mosul are poor and dirty, rarely roofed, and furnished only with the commonest wares. The shop-keepers are generally Christians, but there are many Arabs, and all wear the long tunic of that race. Garden produce is often sold in the squares in open market, and at any time venders may be seen squatting in the streets with eggs or cucumbers in a basket, while the mosque courtyards are favorite places for sweetmeats sellers who display 'Turkish delight' on scalloped copper trays. These street venders are often Kurds and wear one of the tribal costumes of that race, or something between it and the Arab habit.

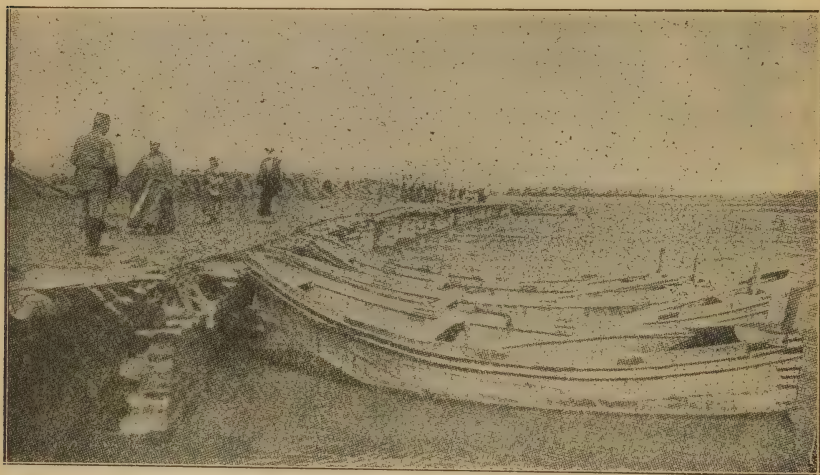


FIG. 6. THE BRIDGE ACROSS THE TIGRIS RIVER AT MOSUL<sup>2</sup>

"All butchers are necessarily Moslem, for no follower of that faith will purchase flesh of an unbeliever. Many of the green-grocers are also Moham-medans, as are the potters. But nearly all the drapers, venders of dry goods, hardware, and leather goods, and all the artisans, are Christian, with the exception of a few Jews. Of the latter there are about 5000 in Mosul, but they are not progressive and have dropped their language and adopted Arab dress. Though practically without any schools until the last decade they have held to their religion. . . They always close their shops on Saturdays, as do the Moslems on Friday and the Christians on Sunday. . .

<sup>1</sup> Warfield, William: *The Gate of Asia*; 'G. P. Putnam's Sons, New York, 1916, pp. 133-135.

<sup>2</sup> *Ibid*; opp. p. 146.



"The bazaars radiate from a picturesque square, quite near the bridge, which is the centre of the town. To the south and south-west are the drapers, shoemakers, and harness-makers; to the north-west are the streets of the butchers and green-grocers; while the potters and dealers in hardware are to be found in narrow stalls opening on a street that runs to the north. Above them rises a half-ruined mosque with a massive minaret of picturesquely patterned brickwork. . . . The squat dome beside it is occupied by the nest of a very superior stork, that looks down in a shocked way from time to time upon the clamour of the streets below.

"The square itself is a meeting place of caravans, whose owners sit on the second-story gallery of a coffee-shop, while the muleteers stroll about the crowded place with cigarettes in their mouths, or lounge among bales covered with brown and white striped sackcloth. . . ."<sup>1</sup>

---

#### EPISODE NO. 4

NOW WE TRAVEL FARTHER SOUTH TO INDIA, A LAND ABOUT WHICH  
MANY STORIES AND SONGS HAVE BEEN WRITTEN—  
A LAND OF BEAUTY AND OF POVERTY

LOCATE THE VILLAGE OF THE NEXT STORY NEAR CALCUTTA  
LETTER IT NO. 4

#### THE POOR OF INDIA

"An Indian who was graduated from the University of Illinois and is now a professor of agriculture at the University of Calcutta, once offered to take me to an Indian village. The village was about twenty miles from Calcutta, and although it was off the railroad line, its nearness to a large city may have subjected it to conditions other than those generally to be found in the *mofussil*. Nevertheless it was typical . . . of many places I saw in India. It was as stagnant as its square, sunken water-tanks. Bengali women who came down the steps to kneel and scrub with wet earth their brass pots, or to fetch water for cooking, or to wash their clothes or bathe, had first to clear away the green scum in a little circle around themselves. The roads were partly under water, from the rains of a week before. It did not surprise me to learn later that in many districts of Bengal the death-rate exceeds the birth-rate, owing to the ravages of malaria. In the whole of this town, which comprises four thousand households, there was but one village industry, offering employment to about fifty women and children and a handful of men—a jute-rope factory. The principal toddy-shop was owned by the biggest money-lender. . . . Bengal happens to be

---

<sup>1</sup> Ibid; pp. 140-141.

caught in the clutches of a powerful land-owning class, known as the *zemindari*, and few peasants actually own land. They are the tenants of absentee landlords, paying four or five rupees rent a month. But it appeared that, because many of them had no money to buy seed, they had no money to pay rent. In order to keep their mud roofs over their heads, they generally had recourse to the money-lender. Only too often the landlord himself turned money-lender, adding interest month by month to the amount of his tenants' indebtedness, the system resulting in an ever-widening vicious circle. . . .

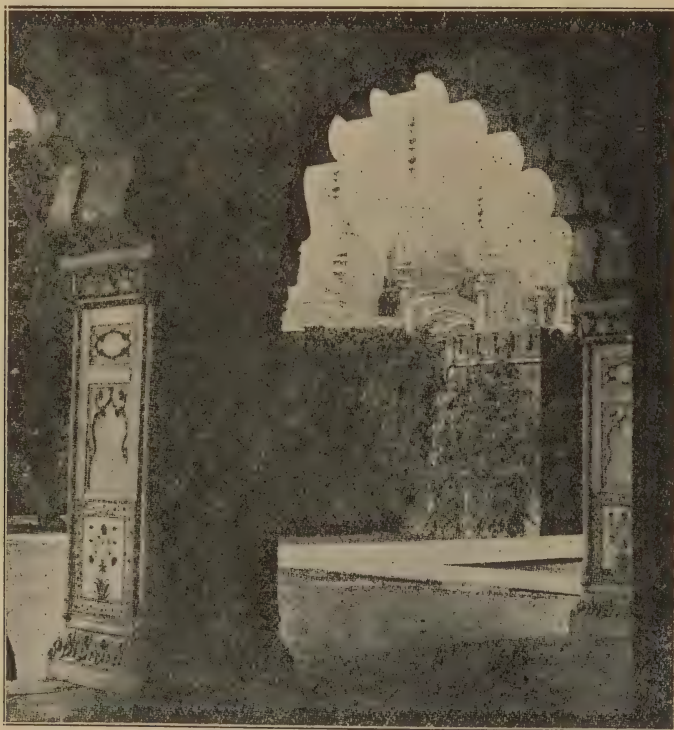


FIG. 7. THE BEAUTIFUL IN INDIA <sup>1</sup>

"When people tell me, as they frequently do, that Indians are in reality sufficiently well off, and that they have plenty of money buried in the ground or invested in jewelry worn by their women, I find myself thinking of the poor wretches I saw in that Bengali village. The road was so bad that we finally chose the lesser of two evils, got down from our dirty, springless *ghari* and walked. My guide and interpreter wished to see how some of his friends were getting on, for it seemed that he had adopted the whole village and was devoting much of his time and energy to the experiment of an

<sup>1</sup> *Asia*, New York, Vol. XXII, June, 1922, p. 426.

attempted regeneration. Presently we came to a little clearing where two mud dwellings stood facing each other. Out in the glaring sun on a dirty blanket, a young man was lying. His eyes were dull with fever. His legs and arms were incredibly thin, mere bones, held in place by a loosely drawn envelope of skin. An old woman with straggling hair fanned the burning sticks laid in a depression in the space between the houses. A glance through the doorways showed the entire contents of each—a few rags by way of bedding, a brass water-jar and an earthen pot. In one of the houses, the young man's father, squatting on his haunches, was shoveling rice into his mouth. He entered into explanation. Yesterday there had been no food because there had been no work. Today there had been a little work and consequently they were eating well. Tomorrow? Well, tomorrow must

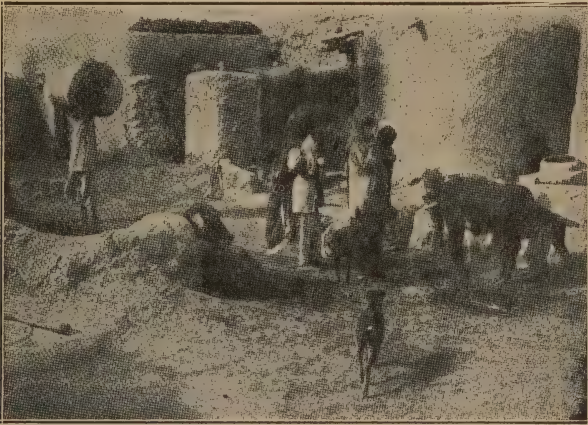


FIG. 8. AND THE HIDEOUS IN INDIA <sup>1</sup>

look to itself. It was not within their power to shape its course. But the boy outside was very bad. They had used up all the medicine that the gentleman had left them when the gentleman came two weeks ago. Had he brought more, perhaps? Ah, surely his name would resound among the most illustrious! Ganesh, the elephant-headed son of Siva and Parvati, sat tranquil in his little niche over the door. Ganesh is many things—the God of Wisdom (was it not he who inscribed the Mahabharata as the sage Vyasa dictated it under the shade of a great banian-tree?), the Household God, the God of Luck. Perhaps it was Ganesh who has brought good fortune to their door. He should be thanked, when the strangers had gone. A flower should be found and laid in his shrine.” <sup>2</sup>

<sup>1</sup> *Asia*, New York, Vol. XXII, June, 1922.

<sup>2</sup> Emerson, Gertrude: “Raw Material for an Indian Nation,” *Asia*, New York, Vol. XXII, June, 1922; p. 432-433.



## EPISODE NO. 5

THE NOMADS AND FARMERS OF MOUNTAINOUS TIBET. THESE  
PEOPLE HAVE BEEN CUT OFF FROM THE OUTSIDE  
WORLD, AND SO ARE LITTLE KNOWN

LOCATE TIBET ON YOUR MAP AND LETTER IT NO. 5

In Central Asia Men Care for Their Flocks and Farm  
in a Primitive Way

"Many of the people of Kham (a province of Tibet) are nomads, who tend their flocks of sheep and yak as they graze over the uplands and live in black yak-hair tents. Others engage in a crude sort of farming in the valleys where the altitude is low enough for grain to mature.

"The nomads live the year round in their tents, seldom even entering a house. When the lower slopes of the mountains become free from snow in the spring, they begin their upward pilgrimage with their herds, closely following the receding snow-line, until in summer they are living far up in the highlands and on the sides of the peaks.

"When winter begins to set in they make the reverse journey going down to the valleys only as fast as the descending snow-line drives them. In this way they are able to utilize the supply of grass to best advantage.

"The herders remain close to the snow also because their yak thrive best in a cold temperature and can not, in fact, stand any great degree of heat, especially if introduced into the warmer temperature suddenly. . . .

"The agricultural people of the lower valleys live in substantial houses of mud with flat roofs. In constructing the mud walls the Tibetans use forms of parallel boards not unlike the forms used in the United States for molding walls of concrete. The mud is beaten into the forms until it is puddled, and when dry it is very hard.

"The agriculturists have few animals. Yak are employed for plowing, however, being brought down from the higher country for the purpose at the proper time.

Crude Plows Drawn by Yak

"The farm operations are carried on under conditions that a well-equipped American farmer would consider a heavy handicap. The plows used are made entirely of wood, with a single handle. They have been developed beyond the most primitive types of wooden plows, however, having removable digging parts, which are replaced when worn or broken.

"The front end of the beam of the plow is attached to the middle of a wooden bar, each end of which is bound to the horns of a yak. One person usually leads the yak team, while another walks behind, holding the handle

of the crude implement. The work of sowing and plowing is done mostly by men, while the women do the greater part of the harvesting, a division of labor the reason for which is not apparent.

"The harvested grain is carried to the tops of the houses, where it is threshed on the flat roofs by means of flails. Primitive mills are set up along the streams, where the grain is ground raw into flour and parched into "tsamba," the latter a particularly important article in the Tibetan diet. The mills are of a simple type common in many lands, consisting of a stationary lower stone and an upper stone revolved on the lower by means of a shaft extending upward through a central hole in the fixed stone. The shaft is attached to a water-wheel below.

### 'Going to Bed' Means Curling Up on the Floor

"The living quarters in the homes of the valley folk usually consist of a single large room, in which all work, including the cooking, is done, and where the members of the family eat and sleep.

"The comforts in such homes are meager indeed. . . . In the ordinary houses 'going to bed' means merely loosening the girdle, opening the sheep-skin garment, and curling up on the floor with the feet toward the stove, which is an essential feature of all habitations in this high, cold country.

"The stoves are built of mud, with a fireplace below and a hole in the top into which pots may be set for cooking. The stove is usually built on one side of the living room, and the members of the family, on retiring for the night, range themselves in a fan-shaped group about it.

"Families possessing domestic animals share their houses with them. In two storied houses the lower floor is the stable, and through it the living quarters are reached. In some one-storied houses the front portion is given up to the animals, while the family lives in the rear.

### Barley Meal and Butter Tea the Tibetan Menu

"The food of the Tibetans is most monotonous to an American or European, accustomed to variety in his diet. They live almost the year round on two things, parched barley meal, called '*tsamba*,' and 'butter tea,' neither of which seems at first view either appetizing or sustaining.

"Tsamba is made by parching barley and then grinding it into a very fine flour. It becomes a sort of emergency ration, for, being parched, it requires no cooking. When Tibetans are on journeys or are wandering about with their flocks and herds, they carry *tsamba* in small leather bags inside their coats, thus always having at hand the materials for a hasty meal.

"In preparing the other principal article of their diet the Tibetans first make a strong liquid by boiling the coarse Chinese tea which they prize most highly. The concoction is strained into a churn and to it are added a

lump of butter, more or less stale, and a handful of salt. The queer mixture is then churned into an emulsion.

"The typical meal among the valley folk of Tibet, and among many of the nomads as well, begins with the drinking of two or three cups of butter tea—a beverage which the Caucasian feels a constant inclination to speak of in quotations-marks, for to him it is neither tea, soup, nor gravy, but a combination of the three.

"As the Tibetan drinks his hot butter tea, he continually blows back from the rim of his bowl the film of butter that rises to the top. After several bowls of the beverage have been drunk there is a considerable accumulation of butter. The bowl is then half filled with the tea emulsion. Into the hot liquid, rich in butter fat, *tsamba* is now poured to be kneaded by the fingers into lumps and eaten.

#### The Wooden Bowl is Licked Clean After Each Meal

"Knives, forks, and spoons are unknown in Tibet—all eating is done with fingers. The wooden bowl is carried in the sheepskin garment next to the skin, and each time after being used it is licked clean with the tongue and replaced in the garment. . . .

#### 'One Person, One Garment'

"The Tibetans are almost wholly independent of the outside world in the matter of clothing materials, and this is especially true of the nomads and village folk. The great majority of the nomads wear garments of raw sheepskin. Nor is their wardrobe more extensive than the variety of its materials. The usual rule is one person, one garment.

"The sheepskin garments are made with the wool inside. A single garment will last for years, and naturally in the course of time comes to have other inhabitants than its owner. In warm weather the wearers of the sheepskins throw the top part of the garment off and go about naked to the waist, or, removing one arm, permit the skin gown to hang from the other.

"The women among the nomads spin the wool from their flocks on a rude spinning-wheel. This is little more than a small disk of wood fastened to an upright, the whole being twirled with thumb and finger.

"The wool, which is fastened to the end of the upright, is thus twisted into thread; the thread is then woven on a crude loom into very heavy woolen cloth about six inches wide. From this cloth purchased with *tsamba* and barley meal, the people of the lower valley, where the climate is not so cold, make their gown-like garments."<sup>1</sup>

Does this description sound like a farmer's life in this country?

---

<sup>1</sup> Shelton, Dr. A. L.: *Life Among the People of Eastern Tibet*; *National Geographic*, Washington, Vol. XL, September, 1921, pp. 297-306.



## EPISODE NO. 6

IN ANCIENT CHINA WHERE THERE IS A CIVILIZATION THOUSANDS  
OF YEARS OLD, TRAVELLING IS VERY DIFFICULT. THESE  
ROADS SEEM TO BE LIKE THE ROADS IN THE  
UNITED STATES A HUNDRED YEARS  
OR MORE AGO

THE STORY TELLS ABOUT CENTRAL CHINA. LOCATE IT ON YOUR MAP  
AND LETTER IT NO. 6

"Never have I seen such a road as we traversed on the first march. I could picture it in the winter with ruts filled deep with yellow dust. I could see how a summer cloud-burst might sweep over it with a force that would carry away carts, mules and men. Now, after a two days' rain, it was liquid mud, through which carts dragged their way up to the axles. In the worst places there was a jam of mired carts and floundering mules. Though the Chinese carter usually lets his fellows shift for themselves, drivers on this road had to be civil; often they could not pass till they had helped pull obstructing carts out of the mud.

"Nowhere else in China have I seen so much traffic on a road in the interior; two and three-mule carts, carrier-coolies, mule-litters, ox-trains, camel caravans, sedan-chairs, and, most of all, wheelbarrows. Laborers in America who think they have a hard life should see these Chinese coolies. Imagine wheeling a barrow with a four or five hundred pound load for hundreds of miles over roads difficult to travel even on horseback! Usually there are two men to a barrow. The one at the handles, by means of a strap over his shoulders, takes much of the weight from his arms, leaving his hands more or less free to guide and balance the load; the one in front drags it forward with a ten-foot rope. Panting and straining, with the sweat streaming from their half-naked bodies; pulling through foot-deep yellow dust, lifting over rocks and dragging up hills; at night gulping a bowl of soup or macaroni and, half dead with fatigue, falling asleep on the ground in the inn courtyard among the pigs, chickens and mules—so they live, day after day, year in and year out, with nothing else to look forward to. All this for fifty or sixty coppers a day, or about eighteen cents in American money. Is it any wonder they seek oblivion in opium?

"During the first day's march the road paralleled the railway, which is being built to Sianfu with Belgian capital. The construction work has already reached Sangchow, one hundred li—about thirty-three miles—from Kwangyingtang, the present terminus. The road to Sianfu will open up a direct way from the far western province of Kansu and will traverse a wonderfully rich country, known for its wheat and for its cotton, which is grown from American seed and is the finest in all China. We saw hun-

dreds of acres pink with buckwheat flowers; orchards of persimmons, pears, nuts; fields of vegetables, corn, Kaoliang, rice and millet. Yet in spite of the trade that makes heavy traffic through this great region of central China, between the railway and the western provinces, no work is done on the roads. What was good enough a thousand years ago is good enough today.”<sup>1</sup>



FIG. 9. LIFE ON A ROAD CUT FOR AGES BY THE SPIKE-STUDDED WHEELS OF CARTS<sup>2</sup>

---

### EPISODE NO. 7

#### JAPAN—A NEW INDUSTRIAL NATION

Do the stories you have read make you feel that all parts of Africa and Asia are very different from the United States? Do you wonder whether there are any countries but your own in which there are factories, railroads, telephones, and the like?

We shall learn soon about the millions of people in Europe who are living in *industrial* countries. But first we must get just a glimpse of an astonishing change that has come about in one of the Asiatic countries. Until about 60 years ago there was hardly a machine in the islands which we call Japan. The people farmed and traded in much the crude way that our forefathers did when they settled America. Today Japan has modern industrial cities, that look very much indeed like cities of our own land.

<sup>1</sup> Andrews, Roy Chapman: The Quest of the Golden Fleece, *Asia*, Vol. XXII, June, 1922, p. 441-442.

<sup>2</sup> *Asia*, New York, Vol. XXII, June, 1922, p. 442.

FOR YOUR MAP  
LOCATE JAPAN AND LETTER IT NO. 7

"In place of castle moats, privileged *samurai* warriors wearing two swords and the despised merchants having little or no social standing, Fukui is now a typical industrious city, with electric lights, steam power, and modern appliances in factory and home, and her young men are ambitious to make fortunes in industry.

"Osaka, once chimneyless and a wilderness of one-story houses, is a forest of smokestacks, with mills, imposing steel-jointed business structures, ship-yards, foundries, and factories.

"With population more than doubled, with wealth increased twenty-fold, and transformed from an almost forgotten hermit nation into a world power, a leader in industry and commerce, with an ambition to be second to none in capturing the markets of the world, it is well for us to look into the causes of Japan's evolution and triumph."<sup>1</sup>

Japan is Not Entirely an Industrial Country, However,  
Since in the Country District One Can  
Still See Old Japan

The old Japan shows what has been the real life of the people for hundreds of years. To really understand the Japanese one must pass from the crowded cities to the fields and farms of one of the most capable and friendly nations of farmers in the world.

"In spite of the rapid strides made in the manufacturing and mining industries in recent years, farming is still the chief source of the wealth and power of the Japanese people.

"The rural population number sixty per cent of the whole, and it is they who supply the empire with most of its food and with the greater part of its raw materials for manufactures.

Practically No Machinery Used in Japanese Farming

"There are few large estates; the Japanese farm small holdings. This is carried on by the whole of the farmer's household. The land does really belong to him, for the popular idea that both the peasantry and their fields are property of the Emperor is a mere legal fiction, and it is no wonder, therefore, that the man 'on the land' works as few peasants in the world have ever been known to work.

"Only about twelve per cent of the whole area of Japan is cultivable, and even this is not naturally very fertile. It is only made to yield its utmost

---

<sup>1</sup> Griffis, William Elliot: The Empire of the Risen Sun, *National Geographic*, Vol. XLIV, October, 1923.



by the most minute and careful system of sub-soil working, manuring, terracing and irrigation, and these are carried on with a thoroughness that almost suggest gardening rather than farming.

"There is practically no machinery employed and nearly all the work is done by hand, hoe, and spade, helped out at times by the ox or the horse."<sup>1</sup>

Travellers' accounts make us want to know more about these interesting Japanese people. Later we shall read more stories about them and study their progress carefully. Just now however we must consider another people—a people who live far from the Chinese and Japanese and have very different customs. Our next glimpse is of South America—its native Indians and its new cities.

---

EPISODE NO. 8

SOUTH AMERICA—A CONTINENT OF GREAT POVERTY, OF GROWING  
TRADE, AND OF SEVERAL IMPORTANT CITIES

FOR YOUR MAP  
LOCATE THE ANDES MOUNTAIN REGION ON YOUR MAP  
LETTER IT NO. 8



FIG. 10. A TYPICAL INDIAN HUT<sup>2</sup>

---

<sup>1</sup> Weston, Walter: Some Aspects of Rural Japan, *National Geographic*, Washington, Vol. XLII, September, 1922, pp. 275-277.

<sup>2</sup> Franck, Harry A.: *Vagabonding Down the Andes*, The Century Company 1921, p. 20.

### The Indian of the Andes

"Whatever his origin, the Indian of the Andes is a distinct kind of person, distinct, indeed, to all the five senses, and he varies little throughout the length of the continent of South America. In build he is stocky and short, very muscular, with strength of a mule for carrying loads on his back, untiring on foot, but weak for other labor. His color is between a tarnished copper and a more or less intense bronze. His head is large; his neck thick and long, his eyes small, black, and penetrating, yet at times strangely suggesting those of a dead fish; his nose is bulky, and somewhat flattened and spread; his teeth are white, even, and always in splendid condition; his long hair, worn sometimes flying loose, sometimes in a single braid wound with red tape, is jet black, without luster, abundant, perfectly straight, strong and coarse as that of a horse's mane, without even a tendency to baldness. His lips are thick and heavy, the lower one somewhat hanging, giving him a suggestion of sulkiness. His forehead is low, his mouth large, and his prominent cheek-bones and large ears give his face an appearance of great width. He is broad-shouldered, with a chest like a barrel, but slender of leg and small of foot. He grows no beard, and has almost no hair on the body.

"Men and women alike, . . . are bare-legged at least halfway to the knees, their feet, like calloused hoofs, marked by stony trails and years of barnyard wallowing. The male wears a broad, round, light-gray hat of thick felt, a kind of pajama shirt or blouse of fancily colored calico, or *lienzo*, a very roomy pair of 'panties' of thinnest white cotton that reach anywhere from his knees to halfway to his undomesticated feet. Besides these garments he is never seen without his *ruana*, or poncho, which serves him as a cloak and carry-all by day, and as a bed and covering by night. This is always of some startling, crude color, deep red predominating, with such screaming combinations as magenta and purple, carmine and yellow, though when sufficiently soiled and sun-bleached, the old rose and velvety brown, the brick red or turquoise blue, take on all the soft richness of Oriental rugs. It is this commonly homespun garment, and the corresponding one of the women, that make Quito such a color-splashed city.

"The woman, too, copies the dress of her ancestors to remote generations. She wears the same hat as the male—hat pins are unknown to her, all down the Andes—a beltless waist of coarse cloth, either open, or thin and ragged; several strips of colored *bayeta* (a woolish shoddy) wrapped tightly around her drafthorse hips from waist to calves in guise of skirt always slit open on one side, showing an inner petticoat—once white—though sometimes in striking solid colors, in marked contrast to the outer skirt; and a blanket, smaller, but as audible in hue as the poncho of the male, thrown around her shoulders like a shawl. She is fond of gaudy earrings of colored glass or similar rubbish ranging in size from large to

colossal; from one to a dozen strings of cheap red beads, often the bean of a wild plant indigenous to the region, hang around her neck; generally brass rings adorn every finger; and often many beads are wound around and round her bare arms. She is completely devoid of feminine charm. She needs none, for she is amply worth her keep as a beast of burden.

"As far as I know, there is no law in Quito requiring an Indian woman not to be seen without a babe in arms, or, rather, in shawl; but if one exists, it is seldom violated. In an hour I have seen, by actual count, more than three hundred female aborigines pass my window in the Calle Flores, and not a score of them but bore on her back a child of from two weeks to two years of age, to say nothing of several other bundles and her whirling spindle. When the infant is tiny, it is carried lengthwise at the bottom of the blanket-shawl knotted across the mother's chest. When it is older, it is tossed or climbs astride her broad back, lying face down, with legs spread, while she throws her outer garment about it, ties the knot on her chest—or on her forehead if the child is heavy—and trots along at her work the day through, without the least apparent notice of the offspring. The babe falls asleep, or gazes with curious, yet rather dull, eyes at the world as it speeds by, peering over the mother's shoulder like an engineer from his cab, eats such food or refuse as falls into its hands, or plays with the mother's tape-wound braid. The Indian woman never carries her offspring in any other manner unless, in her role as a common carrier, she picks up a load too bulky or heavy to place the infant atop, such as a bedstead, a bureau, or two full-sized sacks of wheat—these are no exaggerations, but frequent cargoes—when she hangs the child in front, in the concave of her figure, like a baby kangaroo in the maternal pouch, knotting the supporting garment across her shoulders.

"There is scant difference in appearance between the two sexes, and none whatever in their labor, except that, if there is only one load, the woman carries it, and the baby in addition. In both the half-breed and Indian classes the women are more uncleanly than the men. Like the latter, they work at all the coarser unskilled tasks, shoveling earth, mixing and carrying mortar, cobbling streets; while in the matters of loads there is nothing under two hundred pounds in weight which, once on their backs, they cannot jog along under at a kind of limping gait that seems tireless. Almost any day the furniture and entire possessions of some moving household is displayed to public gaze as it jogs through town on the backs of an Indian family. The chief water-supply of Quito is a constant string of Indians from the fountain opposite the government palace, with huge, red earthen jars sitting on their hips and supported by a thong across the forehead. It is a commonplace to meet an Indian carrying the gaudy image of some saint larger than himself. Cheap coffins of half rotten boards, painted



sky-blue or pink and decorated with strips of gilded paper, frequently mince-past, secured by the brilliant poncho of the carrier, knotted across his chest. I had occasion one day to transport a typewriter a few blocks. The Indian prepared to sling it on his back with a rope. When I objected to this method, I found that the fellow not only could not carry it in his hands, but that he could not lift it to his head. When I placed it there, however, he ambled away as if he had nothing on his mind but his hat.

---

### EPISODE NO. 9

#### THERE ARE BUSY INDUSTRIAL AND COMMERCIAL CITIES IN SOUTH AMERICA, TOO

We cannot take the time to read more about the native Indians of South and Central America. In the next pamphlet we shall learn more about these crude people who make up so largely the population of that great region. Those people have a very old civilization and a very interesting one and we shall wish to read about it.

But as in Asia and Africa so here in South America machinery, and factories, and railroads, and steamship lines, and all the paraphernalia of modern industry have begun to show themselves. They reveal themselves in bustling cities like Buenos Aires in Argentina and Rio de Janeiro in Brazil.

#### LOCATE BUENOS AIRES AND RIO DE JANEIRO ON YOUR MAP AND LETTER EACH PLACE NO. 9

#### The City of Buenos Aires in Argentina

"A generation ago the traveller to Buenos Aires was obliged to disembark in the stream seven or eight miles from the city, proceed in small boats over the shallow waters, and then clamber into huge ox-carts and enjoy the last mile or two of his journey as best he could. Since then, extraordinary harbor improvements, costing millions of dollars, have been completed, and ocean steamers are now able to approach the city through dredged channels. Yet such has been the phenomenal growth of the port that the magnificent modern docks are already overcrowded and the handling of cargo goes on very slowly, retarded by many exasperating delays. The regular passenger and mail steamers are given prompt attention, however, and the customs house examination is both speedy and courteous.

"Hardly has one left the docks on the way to the hotel before one is impressed with the commercial power of this great city. Your taxicab passes slowly through crowded streets where the heavy traffic retards your progress

and gives you a chance to marvel at the great number of foreign banks, English, German, French, and Italian, that have taken possession of this quarter of the city. With their fine substantial buildings and their general appearance of solidity, they have a firm grip on the situation.”<sup>1</sup>

---

#### EPISODE NO. 10

#### EUROPE—THE CHIEF INDUSTRIAL CONTINENT OF THE WORLD

#### LOCATE LONDON ON YOUR MAP AND LETTER IT NO. 10

The countries of Europe are quite different from the land about which we have been reading, and so the people of Europe are different from the people of Africa, Asia, and South America. It is in Europe that the greatest industrial nations have developed. Coal mines have been worked, steel mills have been built, factories have grown up, railroads have been constructed, ships have been sent with goods to the far parts of the world. As a result of these facts the great European countries, like the United States, have grown rich and powerful.

Not all of Europe is industrial, of course. There are still many farmers, or peasants, who live on the land as their grandfathers did. But Europe is especially important because of its great industries and trade.

Turn back to the population map of the world (Fig. 1). Study again the five regions in which human beings live most crowded together. One of them is “western Europe.” If you will study the map more closely and compare it with a wall-map or a map in your geography which shows the countries you will see that people crowd together in large numbers in the British Isles, France, Germany, and Italy. In limited portions of Austria, Hungary, Czecho-Slovakia, and Russia, also, population is congested. But in these countries more people are still engaged in farming than in manufacturing and business.

It is travelling about Great Britain and Germany especially, and parts of France and Italy, that makes one think he might be in northwestern United States. The great manufacturing cities of Manchester, Birmingham, Sheffield, or Leeds, in England, might well be mistaken for American industrial cities. People in Liverpool dress much the same, do much the same kinds of work, eat much the same kinds of food as do people in Pittsburg or Cleveland or Seattle. Business is done in London very much as it is in New York; for that matter in Berlin, in Paris, in Prague, in Buda-Pest—yes, in Calcutta, Shanghai and Tokio.

---

<sup>1</sup> Bingham, Hiram: *Across South America*, Houghton, Mifflin Company, Boston, 1911, pp. 30-32.

The coming of steam power and machines and railways and telegraphs has made people who live by them live very much the same kinds of lives. Read this next story of life in the East side of London—the quarter where the mechanics and laboring people live. Could not this picture it gives be said to be that of life in almost any eastern American city?

England is One of the Greatest Industrial and  
Commercial Cities in the World



FIG. 11. LONDON STREET LIFE IN THE EAST END OF LONDON <sup>1</sup>

#### THE FACTORY GIRL OF LONDON

“East London—one cannot repeat it too often—in a city of working bees. As we linger and loiter among the streets multitudinous, we hear, as from a hive, the low, contented murmur of continuous and patient work. There are two millions of working people in this city. The children work at school; the girl and boys, and the men and women, work in factory, in factory, in shop, and at home, in dock and in wharf and in warehouse; all day long and all the year round, these millions work. They are clerks, accountants, managers, foremen, engineers, stokers, porters, stevedores, dockers, smiths, craftsmen of all kinds. They are girls who make things, girls who sew things, girls who sell things. There are among them many

<sup>1</sup> Besant, Walter: *East London*, The Century Company, New York, 1901 p. 11.



poor, driven, sweated creatures, and the sweaters themselves are poor, driven, sweated creatures, for sweating once begun is handed on from one to the other as carefully and as religiously as any holy lamp of learning. They work from early morning till welcome evening. . . .

"I introduce you to a baby. Her name is Liz. She has as yet but a few days of life behind her. She is hardly conscious of hunger, cold, or uneasiness, or any of the things with which life first makes its beginning apparent to the half awakened brain. . . .

"The room where the baby lies is a first-floor front, in a house of four rooms and a ruinous garret, belonging to a street which is occupied, like all the streets in this quarter, wholly by the people of the lower working-class. This is London Street, Ratcliffe. It is a real street, with a real name, and it is in a way typical of East London of the lower kind. . . .

"We are, then, in a first floor front. Look out of the window upon the street below; meanwhile the baby grows. The street contains forty houses. Each house has four rooms, two or three have six; most of the people have two rooms. There are, therefore, roughly speaking, about one hundred families residing in this street. The door-steps, the pavement, and the roadway are swarming with children; the street is their only playground. Here the little girl of six bears about in her arms, staggering under the weight, but a careful nurse, her little sister, aged twelve months; here the children take their breakfast and their dinner; here they run and play in summer and in winter. It seems to be never too hot or too cold for them. They are ragged, they are bareheaded, they are barefooted and barelegged, their toys are bits of wood and bones and oyster shells, transformed by the imagination of childhood into heaven knows what of things precious and splendid. Of what they have not they know nothing; but, then, they mind nothing, therefore pity would be thrown away upon them. It is the only world they know; they are happy in their ignorance; they are feeling the first joy of life. By their ruddy faces and sturdy limbs you can see that the air they breathe is wholesome, and that they have enough to eat.

"The room is furnished sufficiently, according to the standards of the family. There is a table, with two chairs; there is a chest of drawers with large glass handles. On this chest stands a structure of artificial flowers under a glass shade. . . .

"You will perceive, however, that this child is not born of the very poor; her parents are not in destitution; her father is, in fact, a docker, and, being a big, burly fellow, born and brought up in the country, he gets tolerably regular employment and very fair wages. If he would spend less than the third or the half of his wages in drink his wife might have a four-roomed cottage. But we must take him as he is. His children suffer no serious privation. They are clothed and fed; they have the chance of living

respectably and with such decencies as belong to their ideals and their standards. In a word, Liz will be quite a commonplace average girl of the lower working-class. . . .

#### As Soon As She Was Fourteen, Liz Went to Work

"There is apparently a choice of work. There are many industries which employ girls. There is the match-making, there is the bottle-washing, there is the box-making, there is the paper-sorting, there is the jam-making, the fancy confectionery, the cracker industry, the making of ornaments for wedding-cakes, stockings for Christmas, and many others. There are many kinds of sewing. Virtually, however, this child had no choice; her sisters were in the jam factory, her mother had been in the jam factory, she too went to the jam factory."

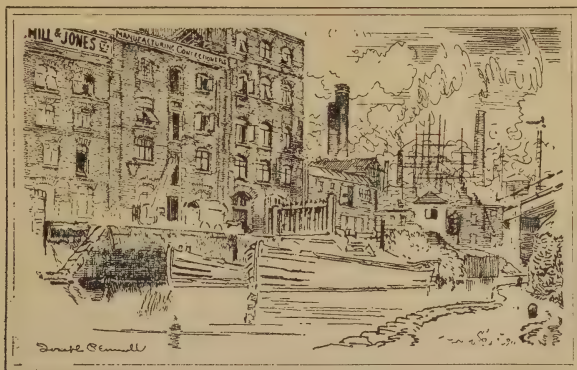


FIG. 12. AN EAST END FACTORY<sup>1</sup>

" . . . Liz found herself at half-past seven in the morning in a huge building, where she was one among a thousand working women and girls, men and boys, but chiefly girls. The place was heavily laden with an overpowering fragrance of fruit and sugar. In some rooms the fruit was boiling in great copper pots; in some, girls were stirring the fruit, after it had been boiled, to get the steam out of it; in some, machinery crushed and ground the sugar till it became as fine as flour. The place was like a mill. The flour of sugar hung about the room in a cloud of dust; it lay in such dust on the tables and the casks, it got into the girl's hair, so that they were fain to tie up their heads with white caps; it covered their clothes, and made them sticky; it made tables, benches, floor, all alike sticky. . . .

" 'I like the smell,' said Liz. First impressions are the best; she continued to like the smell and the factory and the work.

<sup>1</sup> Ibid, p. 30.

"She was stouter and stronger than most girls. They gave her a skirt of sacking, and put her where her strength would be of use. She liked the movement, she liked the exercise of her strong arms, and she liked the noise of the place; she liked the dinner-hour, with its talking and laughing; she liked the factory better than the school; she liked the payday, and the money which she kept for herself. . . ."

---

#### THE SUNDAY OF A GERMAN WORKINGMAN

Germany, like England, is an industrial country, a country of cities, factories, mines, and railroads.

The following story gives an account of the Sunday of a German workman before the war. The lives of the German workers are very different today—but we shall hear more of that later.

What is there about this story which shows that the country in which this workingman lives is an industrial country?

"Since early morning German workingmen with their wives and children have been coming from the crowded, red-tiled houses of the town, loitering across patchwork fields and reaching at last the paths along the hillsides. They are clad in Sunday best, poor but neat and clean with bright patches of color and a certain engaging quaintness of style. The man of the family goes first, his hard black hands clasped behind him, and his wife follows with the children. She is talking in the mellow German intonation with a neighbor further down the hill, who also has a flock of children. Occasionally they stop to rest for a time on one of the green seats provided by some *verein*, and look out over the familiar valley where the town lies asleep in the June sunshine with the lazy breath of banked fires rising from a hundred tall chimneys. Thus they stroll upward along the paths, which, though devious, have a way of coming out invariably at a pleasant little inn with tables set outside among the trees, and they never end until the workman is just thirsty enough, and not too thirsty.

"Here white-aproned waiters rush about with tall wooden mugs of pale beer and sandwiches of wiener-wurst. In a corner a funny little orchestra, three fat men, each with a mug of beer before him, and playing two violins and a 'cello. Among these familiar surroundings the workman gathers his family at a table and orders a mug of beer; one does well for all of them, and they drink out of it in turn—when it is empty they have it filled again; three or four in an afternoon, costing ten or fifteen cents (for it is cheap beer containing little alcohol) are quite enough to give them a glow of friendliness, so that toward evening, when the singing begins, they may all lend their voices with vigor and enjoyment." <sup>1</sup>

---

<sup>1</sup> Baker, Ray Stannard: *Seen in Germany*, Doubleday, Page & Company, New York, 1909, pp. 97-98.



Now that we have seen how different are the lives of people in different parts of the world, let us see the way in which these far parts of the world are becoming closely connected.

THE MANUFACTURERS AND BUSINESS MEN OF THE GREAT  
INDUSTRIAL NATIONS HAVE BEEN PUSHING OUT INTO  
THE UNDEVELOPED REGIONS OF THE WORLD

The men who have made money in the mines, mills, and factories of the great industrial countries have been pushing out into Africa, Asia, Australia, and South America. They have been using the money they made at home to build railroads, open up oil wells and build factories in the "new" countries of the earth. In this way they are *industrializing* these countries. And as the products of English, German, French, and American factories come into these far parts of the world, as factories are built there, these old lands, so different from ours, become more and more like *our* industrial countries. That is what we mean by saying that though there are so many



FIG. 13. THE FACTORY CHIMNEYS OF RUSSIA <sup>1</sup>

different kinds of people with such different customs, they are becoming more and more alike as their countries become industrialized. So we live in a new world.

EXAMPLES OF THE WAY IN WHICH THE UNDEVELOPED PARTS  
OF THE WORLD ARE BECOMING INDUSTRIALIZED

Russia

Russia, a great peasant country partly in Europe and partly in Asia, began to develop industrially before the War.

<sup>1</sup> *Asia*, New York, Vol. XXII, July, 1922, p. 565.

Until recent years it was very difficult, if not impossible, to cross the great wastes of Siberia which is part of Russia. Look at the map and see how tremendous Siberia is. Then a railway, the Trans-Siberian Railway, was thrown across those thousands of miles. As a result industry and trade began to develop.

### A Mushroom Town in Siberia

"Our point of departure was the town of Novo Nikolaevsk, a mushroom growth of the years since the opening of the Trans-continental line, for it stands at the meeting point of two great lines of trade—that of the Obi, which brings down the minerals and the grain and the butter from the south, and that of the railway which carries these products eastward to Irkutsk and beyond to the Pacific, westward to Russia and Germany. It reminded me of the new cities in the newest parts of America, with its big warehouses rising fast along half-finished roadways, while the untouched prairie, dotted here and there with scrub birches, lay just outside the houses."<sup>1</sup>



FIG. 14. A MARKET PLACE IN SIBERIA<sup>2</sup>

### Persia, An Old Country of Asia, Which the European Capitalists Are Trying to Industrialize

"When we talk of the future of Persia, do we mean the future of the huge tract of land that makes the present Persian Empire? Will it satisfy us if we see Persia brought to a point in which she can produce goods for the

<sup>1</sup> Bryce, Viscount James: Western Siberia and the Altai Mountains, *The National Geographic*, Washington, Vol. XXXIX, May, 1921, p. 485.

<sup>2</sup> *Asia*, New York, Vol. XXII, February, 1922, p. 139.

betterment of mankind in general? If the vast subterranean lake of oil that is believed to lie far below the surface of the land becomes fully harnessed, so that its power drives the engines of the world and aids the production and development of other countries; if its coal and copper and iron are brought to the surface; . . . if its one navigable river is covered with water-borne commerce; if its innumerable falls and mountain streams are harnessed for power, so that its towns are lighted and heated by electricity



FIG. 15. TRYING TO STRIKE OIL IN PERSIA <sup>1</sup>

and are given pure water in leaden pipes; if its waste lands are irrigated and motor-plowed, so that all its valleys stand thick with crops of corn and cotton and tea; if its great forests, maintained properly, are turned into timber regularly fed to sawmills; if Persia itself becomes a great highway for the world's traffic between West and East, link in the long air-way that should run from New York to London, Paris, Constantinople, Mosul, Isfahan, Yezd, Quetta, Calcutta, and to put a girdle round the earth through Rangoon and the Far East; if we do all these things, or see all these things, is that what we mean by the progress of Persia?" <sup>2</sup>

China Is Another Ancient Country, Largely Agricultural, Which  
Has Many Resources, and So Is Being Industrialized

Trains have been built largely by foreign capitalists in China. Here is one standing on the tracks at the Tayeh Iron Mines which are controlled by Japanese capitalists.

---

#### THE WORLD IS BECOMING MORE AND MORE ONE WORLD

The Congo with its forests, its great rivers, its naked black inhabitants seems to belong to a different world from England with its railroads, its

<sup>1</sup> *Asia*, New York, Vol. XXIII, April, 1923, p. 248.

<sup>2</sup> Moore, Arthur: *Persia in the New Age*, *Asia*, New York, Vol. XXIII, April, 1923, p. 246.



factories, its crowded cities. But because England and the other industrial countries have been going into "new" countries for their raw materials, for markets for their cotton cloth and steel products, and because they have



FIG. 16. MAKING PIG-IRON IN CHINA <sup>1</sup>

been building railroads, opening mines, and building factories in all these far countries, the world is becoming a more and more unified world—a new world which we will see more of as we study the pamphlet.

**YOUR NEXT PROBLEM IS TO LEARN WHAT THE PAMPHLET IS ABOUT**

Turn rapidly through the entire pamphlet. First read the titles of the sections. Then glance over the headings in the pages of each section. Talk



FIG. 17. A TRAIN STANDING AT THE TAYEH IRON MINES IN CHINA <sup>2</sup>

these over in class. In this way, in a class exercise you can obtain an idea of the whole pamphlet.

<sup>1</sup> *Asia*, New York, Vol. XXII, February, 1922, p. 109.

<sup>2</sup> *Asia*, New York, Vol. XXII, January, 1922, p. 17.

Notice first that the pamphlet tells about only those countries which are most like the United States: Great Britain, the French Empire, Germany, and the United States itself. These are studied because they are the principal industrial nations of the earth and because they dominate such a large portion of it. These countries control the destinies of nearly half the people of the world.

As you study these *industrial* countries look for such facts as these:

1. That industrial countries contain a large population.
2. That industrial countries have many cities and that the cities of the industrial countries of England, Germany, France, and the United States are much alike.
3. That as more people engage in industries fewer people in proportion engage in agriculture.
4. That the important industrial countries have supplies of coal, iron and other minerals. That cities and industries have grown up around the coal and iron.
5. That great railroad and water transportation systems have grown up within and between industrial countries.
6. That countries with many industries depend upon less industrial countries for food and raw materials, and upon each other for raw materials and manufactured goods.
7. That undeveloped countries which depend upon agriculture for a living are much less dependent upon the outside world for goods than are industrial countries.
8. That the manufacturers and business men of each industrial country are trying to secure for themselves the raw materials of the undeveloped countries, and the markets for manufactured goods which they supply, and that this competition between capitalists has led to wars between nations.

ONE OF YOUR IMPORTANT TASKS IN STUDYING THE SOCIAL SCIENCES  
IS TO BECOME SKILLFUL IN GETTING THE OUTLINES OF NEW  
PROBLEMS. PRACTICE IT WHENEVER YOU GET A CHANCE

---

We hope that before you complete your junior high school social studies you will be able to explain:

HOW IT HAS COME ABOUT THAT EACH PART OF THE WORLD DEPENDS  
UPON OTHER PARTS OF THE WORLD, AND THAT INJURY TO ONE  
PART AFFECTS THE WHOLE WORLD

## SECTION II

### THE NARROW WORLD OF THE DAYS BEFORE THE STEAM ENGINE

"What an enormous world we live in today," perhaps you are thinking, now that you have finished reading the stories of different parts of the present day world.

It is enormous—yet almost every boy or girl in the United States knows something about many parts of it. Furthermore, the life of each of us depends in some way upon some far-away corner of the globe.

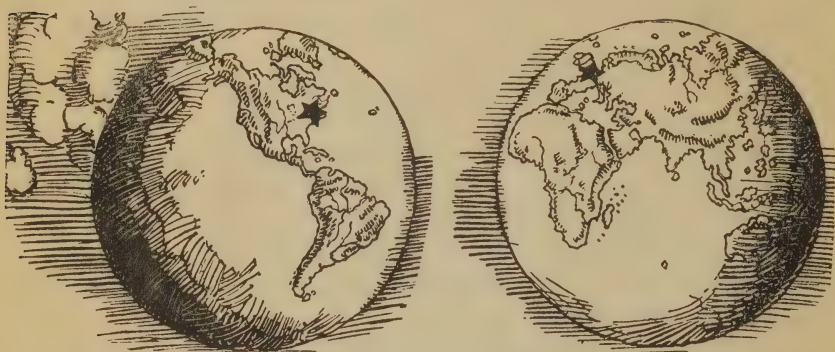


FIG. 18

#### "What is your World?"

If someone asked you that question you would laugh, because you would think it an absurd question.

But if the questioner insisted on knowing, you might point to a map of the world or to pictures such as the one above showing the globe.

You would be quite right. That *is* your world. In your morning paper there may be items, not only from New York and San Francisco, but from London, Cairo, Peking and Cape Town in South Africa. You may wear woollen cloth that was made in England. There is linen on your table woven, perhaps, in Germany. You eat dates that have come from Asia. You use china on your dining-table that has come from Austria. Your coffee comes from South America as does much of the rubber which you are using in one form or another.



The whole known world is your world. The railroad, steamships, telegraphs, radio—such things as these have made that possible.

Did the People of Earlier Times Have as Large  
a World as We Do Today?

Did the people of Greece 2000 to 2500 years ago?

Did the Romans 1500 years ago?

Did the lords in their castles, the monks in their monasteries; the peasants on their farms in the long, dark centuries of the Middle Ages?

Think back, say, seven or eight hundred years. In the 1100's and 1200's what would have been the answer of any educated European to the question, "What is your world?" Did he know of the countries every school boy knows today?



FIG. 19. MAP OF WORLD OF THE MIDDLE AGES

This map shows how little of the entire globe was known by European people even as late as 1492. In 1100 Asia, also, and most of Africa were unknown to our western ancestors. Notice how the known world centered around the Mediterranean Sea.

Did he know Asia? Yes, he knew there was such a region. His information about it was very vague, however.

Did he know of North America and South America? No, he had never heard of them.

Australia? No such place existed for him.

Africa? A part of it only.

Evidently his world was a very narrow world.

Of course, the earth in all those centuries was just as large as it is now, but people were ignorant of it; that is, most people—even the fairly well educated ones—and there were not many of those.

What was their known world, then, of the Middle Ages? It was merely what is shown in the lighter part of the map (Fig. 19).

The world which has been known to Europeans since the time of early Greece and Rome all centered around the Mediterranean Sea. This has been true ever since for most of the world's traders and travellers have gone between Europe and Asia by way of the Mediterranean. The Mediterranean region has been important throughout all history. We shall study much about it as we go on.

### DID MOST PEOPLE OF THE MIDDLE AGES KNOW ABOUT THE WORLD OF THAT DAY?

No, only the travellers and traders and a few well educated people. To most people, the world consisted merely of the locality in which they lived. You see most people never travelled. They had no railroads, no steamships, no fine rolled roads, no automobiles. A trip on foot or on horseback to the next village was a rare event; to many people it never happened. Their's was a very shut-in existence. Their world was a little wider than their home community.

In fact, about the year 1100, the world of most Europeans contained no more than is shown on the plan on page 39.

---

## I.

### THE SHUT-IN LIFE ON THE MANOR OF THE MIDDLE AGES

Do you know what Fig. 20 represents? It is a plan of a *manor*. After the Roman Empire fell to pieces during the fourth and fifth centuries after Christ, and the barbarians poured out of Asia and spread over Europe, most Europeans lived on manors of this kind and for several hundred years this was the typical community.

Let us see then this manor which was the whole world to the majority of Europeans in 1100 A. D.

### THE MANOR WAS BOTH FARM AND VILLAGE

Does the picture of the manor look like anything you know personally. You have seen farms and you have seen villages, but the manor was both a farm and a village.

Do you see the row of cottages where the villagers live, each with its toft, or enclosed space, around it?

Then, do you see the castle of the lord in the lord's demesne (pronounced domain)? The lord had a special plot of ground that was reserved for his crops. In the castle he lived—the rich man to whom the whole manor belonged. In those days, you see, few of the people owned land. Great sections of it, including the homes of the farmers, were owned by rich men.

In the corner of the lord's demesne is shown the church.



FIG. 20<sup>1</sup>

Now the land of the manor was of three kinds, pasture lands, the waste and wood-lands and the fields. Can you find them in the picture?

In the pastures the villagers kept their horses, and cows, and swine. In the waste, or woodland, the villagers had the right to cut turf, gather wood, and pasture cattle or swine.

<sup>1</sup> Usher, A. P.: *The Industrial History of England*, Houghton, Mifflin Co.



HOW LAND HAS GENERALLY BEEN DIVIDED  
IN EUROPE

The fields were divided in a very peculiar way. If you drive through a farming region of the United States today you will see great fields each planted with some one crop, perhaps wheat, corn or oats. Farming fields in our country are generally pretty large, many acres in size.

The manor fields were different. The picture (Fig. 20) shows that there were three huge fields, the West Field, the North Field and the East Field. Do you see that each field is not divided into a few rectangular pieces as one would find in our country? Instead each is divided into a number of very narrow strips (some only a few feet wide), running in several directions. Some of these strips were cultivated and some left unploughed.

Do you see the blackened strips, seven in the West Field, eight in the North Field and eight in the East Field? Those 23 strips were farmed by one man. Thus, the land of one man was scattered around over the manor—not all together as in American farming today. This was done on the manor so that the good and the bad land would be divided up fairly.

To this day most Europeans have continued this way of farming land in narrow strips rather than in broad fields. As one rides on a train through France, and Italy, and Austria, and Hungary, and Czecho-Slovakia, and Poland today he sees hundreds of miles of farming land cultivated in narrow strips, and one man may farm several widely separated strips. We shall study this matter later.

The Farmers of the Middle Ages Were Careful Not To  
Wear Out Their Land. They Planted According  
to "Three-Field-System"

Perhaps you know enough about farming to know that if land is planted year after year it loses some of the elements necessary for good crops and is finally worn out. In the Middle Ages the European farmers were careful about this matter. They did not cultivate the same land year after year with the same crop. In the autumn the fields would be sown with wheat; in the spring with barley and oats; and the second year the field would lie fallow (unplanted). This gave the land a chance to rest. In this way, only two fields of the manor were cultivated in any one season.

Because of the farmers' great care some of the soil of Europe has produced crops for many hundreds of years. On the other hand much of the soil of the United States will not raise good crops because it has been ruined by careless farming.

WERE THE VILLAGERS OF THE MANORS FREE MEN WHO  
OWNED THEIR LAND AND WORKED  
FOR THEMSELVES?

Were they farmers who could buy or sell their strips of land as farmers buy and sell today? Not at all. They merely were given the privilege of farming the land by the "lord" of the manor. They could not buy or sell it. *They could not even leave it.* From generation to generation they must stay on the land, plowing, planting, cultivating, and harvesting.

In this way they were slaves, in that they could not work as they pleased and go and come as they pleased, but must stay on the land where they were born. In America and in many countries today we would regard that as about the worst thing that could happen to us.

But they were not quite like slaves because the lord could not buy or sell them as he could buy or sell slaves.

THESE MEN AND WOMEN, TIED TO THE MANORS  
OF THE MIDDLE AGES, WE CALL SERFS

They were of two kinds, the *villeins* who cultivated fairly large amounts of land—thirty acres or so—and the *cotters*, who usually held only one or two acres. The cotters had to work for the others in order to make even a very poor living.

Occasionally, too, on the manor there were real slaves, as well as free farmers who were not tied to the land, but most of the villagers were serfs.

HOW DID THE SERFS PAY THE LORD FOR THE LAND  
THEY HELD FROM HIM?

The serfs paid very heavily for the land, but not in money. For the most part they paid in service to the lord. This great man held for himself a certain part of the manor land, sometimes in strips, sometimes in one piece.

The villeins and cotters were compelled to work part of the time on the lord's land. Every week they must work a certain number of days for the rich man who owned the manor and all its parts. Usually the villeins gave three days a week and the cotters two. In addition, at the harvest, hay-making, and ploughing times, they were forced to do extra work for the lord. And this bore very heavily upon them, because at those very times they needed to do extra work on their own land. Sometimes a delay of two or three days in doing their work meant the loss of their crop. This often happened. Of course it did not endear their "lord" to them. They probably often rebelled but there was no way out of it.

In addition to the service which the villeins and cotters gave to the lord, they had to give him fowls and eggs, oats, and other products. Nor could the serfs marry their daughters, or sell their oxen without the permission of the lord, and perhaps a payment to the lord.

The life of the common people in the Middle Ages was not to be envied, was it?

#### THE POVERTY OF THE COMMON PEOPLE COMPELLED THEM TO WORK TOGETHER

Within the manor, the serfs were dependent on each other. You see they were so poor that they had to use their implements and tools cooperatively. One man would own a plow, another oxen, still another a cart. No one person ever owned all these things, *so they were forced to work together*, to co-operate. The manors were not "communistic," however,—that is, the village as a whole did not own the implements. Whatever a villein owned was his personal property, but it was understood that it must



FIG. 21. THE PLOWMAN ON THE MANOR <sup>1</sup>

be at the service of others. The plow and the oxen went together, and therefore a few villeins would perhaps plow all the land while the others did other important work for the community. When it came to harvesting, one villein probably gave his cart to haul the wheat while another gave his oxen. After the harvests were in, the practice was to turn cattle into the fields to eat the stubble, then it behooved each farmer to see that his grain was harvested by the time that the others was done.

It didn't take good fences to make good neighbors in manorial times, for there were almost no fences to mark off the land of one villein from that of another.

#### Why Would It Be Correct To Say That the Medieval Manor Was a Co-operative Community?

<sup>1</sup> Coulton, G. G.: *Chaucer and His England*, G. P. Putnam's Sons, New York, 1908.



## EACH MANOR LIVED ALMOST ENTIRELY TO ITSELF

The manors of Europe during the Middle Ages were little cultivated spots scattered around through great spaces of woods of waste land. No railroads connected them, and if there were roads they were very poor ones which could be travelled only with great difficulty. There were almost no bridges, and robbers infested all the highways.

Practically all of the necessities of life were produced on the manor itself. If a tool was needed in one of the households of the village, there was generally a smith to make it. When the corn was ready, there was the lord's mill in which to grind it. They sheared their own sheep, and spun and wove the wool into cloth, and the cloth into clothing. They even had their own courts on the manor and the lord presided as judge over them. The village fisherman caught fish for the people on the manor.

In England, salt was bought at the nearest fair, or in other parts of the kingdom. Millstones were brought to the manors from France, and iron for the implements from Spain.

Occasionally a pedler with his load on his back would come to the manor bringing small ornaments, silks, and spices from the Orient. These articles were more likely to be bought at the castle, however, than in the cottages. The serfs had no money or goods to be given for such luxuries. They were lucky to have enough to eat.

But aside from these few articles the manor depended little on the world outside for what it used and most of the serfs knew little of that world.

## THE POVERTY OF THE COMMON PEOPLE

Through all these centuries most of the people lived in great hardship. In the main they lived in little huts of wood and thatch, usually of one room, with rough dirt floors. Their houses were, in fact, much like those of our pioneer ancestors, but they had no chimneys then nor fireplaces such as our forefathers had. Can you imagine homes without chimneys for smoke and bad air to pass out? That was the kind of home in which almost all the serfs lived. Do you think they had bedsteads with hair, wool, or cotton mattresses to sleep on? No, indeed; at night they climbed the ladder to the loft and slept on piles of straw. The furniture was as crude as their sleeping quarters, and so was the food. "Their food would seem poor to us. There were no sweet cakes or puddings, little fresh fruit, and few green vegetables. Fish and peas, or pork and cabbage, were thrown into a pot and boiled and set on the table in one dish. Every one used his fingers or a piece of bread to handle his food."<sup>1</sup>

<sup>1</sup> Coulton, G. G.: *Chaucer and His England*, G. P. Putnam's Sons, New York, 1908.

Here is a description written by one of the people's poets, William Langland, in 1362:

"the poor in the cottage,  
 Charged with a crew of children and with a landlord's rent.  
 What they win by their spinning to make their porridge with,  
 Milk and meal, to satisfy the babes—  
 'The babes that continually cry for food—  
 This they must spend on the rent of their houses,  
 Ay, and themselves suffer with hunger,  
 With woe in winter rising a-nights,  
 In the narrow room to rock the cradle,  
 Carding, combing, clouting, washing, rubbing, winding, and peeling  
 of rushes.  
 Pitiful is it to read the cottage women's woe,  
 Ay, and many another that puts a good face on it,  
 Ashamed to beg, ashamed to let neighbors know  
 All that they need, noontide and evening.  
 Many the children and nought but a man's hands  
 To clothe and feed them; and few pennies come in,  
 And many mouths to eat the pennies up."

The condition of poverty and bondage in which the serfs of the Middle Ages lived was of course made worse by many hardships which the lord imposed on them. If a serf died, the lord claimed the best possession left by his dead tenant, while the parish clergyman claimed the second best! Thus the widow and orphans were often left with almost nothing.

Cardinal, Jacques de Vitry, writing at that time said that many knights (lords) forced their serfs to labor and did not even give them bread to eat. "Many say nowadays, when they are rebuked for having taken a cow from a poor peasant: 'Let it suffice the boor that I have left him the calf and his own life. I might do him far more harm if I would: I have taken his goose, but left him the feathers.'"<sup>1</sup>

It was this poverty and oppression which led to the revolt of the serfs in England in 1381 when thousands of serfs marched on to London. The revolt failed and the lords revenged themselves bloodily on the serfs. The end of serfdom had not yet come.

#### SUMMARY

This, Then, Was the Life of the Middle Ages in Europe:

We only want to show you something of how the people of the Middle Ages lived in their own little world and had almost nothing to do with the great world outside.

<sup>1</sup> Ibid, page 262.

Little groups of people scattered here and there through the forests of Europe, living to themselves and depending upon themselves.

By far the greatest number of people of that time were serfs, as the Domesday Survey, a census taken in England in 1086 shows:

Gentry (Lords, Nobles, Knights) and Clergy . . . . .	9,300
Free-holders of land (free farmers) . . . . .	35,000
Serfs . . . . .	259,000
Slaves . . . . .	25,000

#### EXERCISE

Make a list on the blackboard of the ways in which the serfs of the Middle Ages were different from the farmers of today.

## II.

### THE BOUNDARIES OF THE WORLD BEGAN TO WIDEN

This self-sufficient agricultural life was not to last forever. You see the European world had not always consisted of little farming villages disconnected from the rest of the world.

Long ago, in ancient times, the Mediterranean Sea had been the center of a highly developed civilization and of a great trade. But during the dark centuries after the Roman Empire had fallen, this trade had to a considerable extent stopped. Not entirely, of course. We saw that a few things were imported into England. But after all, only a small amount of goods came through Venice and Amalfi in Italy, from the east to the rather barbarous lands of Europe.

Gradually during the Middle Ages we see trade reviving. More and more goods began to pass back and forth from east to west, from west to east.

#### TOWNS AND CITIES GREW UP AS TRADE INCREASED

The towns and cities of the old Roman Empire had fallen largely into decay. Now old cities began to gain new life, and new cities developed.

These new cities grew up for the most part around the castles of kings, nobles, and bishops.

The cities grew strong and wealthy through their trade and through the goods their craftsmen produced.



LONDON WAS BECOMING A CITY OF BUSY STREETS  
AND MARKETS AND WORKSHOPS

In the fifteenth century, 40,000<sup>1</sup> people were already living in London on the Thames River.

"Some streets . . . were as crowded as any oriental bazaar; but most of the buying and selling went on in open market, with lavish expenditure of words and gestures; while the shops were open booths in which the passer-by could see master and men at their work, and stop to chat with them on his way. In the absence of catalogues and advertisements, every man spread out his gayest wares in the sun, and commended them to the public with every resource of mother-wit . . . Cornhill and Cheapside were like the Mercato Vecchio at Florence or St. Mark's Square at Venice.



FIG. 22. LONDON IN THE SIXTEENTH CENTURY <sup>1</sup>

"Barons and burgesses and bondmen also . . .  
Baxters and brewsters and butchers many.  
Woolwebsters and weavers of linen,  
Tailors and tinkers, and toilers in markets,  
Masons and miners and many other crafts . . .  
Cooks and their knaves cried 'Hot pies, hot!

<sup>1</sup> Ibid, opp. page 15.

Good Griske and geese! go dine, go!  
 Taverners unto them told the same (Tale)  
 'White wine of Alsace and red wine of Gascoyne,  
 Of the Rhine and of Rochelle, the roast of defy!'"  
 (From *Piers Plowman*)<sup>1</sup>

"Even thus early, the city fully set forth the dignity and enduring power of commerce and industry in an age of indisguised physical force. Its foreign trade was considerable, and foreign settlers numerous. Already there was trade with the Rhine and Zuyder Zee; and Norman ships, so far back as the days of Aethered and even of his father, had brought the wines of the south to London. The (German) Emperor's men had already established their steel yard (a weighing scales, and traded under jealous rules.)"<sup>2</sup>

#### MERCHANTS CAME TOGETHER FROM MANY LANDS TO BUY AND SELL AT THE FAIRS

In London, as in other towns and cities of England, fairs were held as trade revived. Merchants and traders brought their wares from other parts of England, from the continent and from Asia. These fairs were held at regular periods, perhaps once in three to six months or once a year. The merchants knew when these fairs took place and timed their arrival for them.

"Such fairs as those of Winchester, Stourbridge, Boston, St. Ives, St. Edmundsbury, and others, seemed to be national, and even international in character. The Winchester fair was throned with merchants from Flanders, Normandy, Gascony, as well as from London, Southampton, Bristol, and other English towns. Traffic went on in wine, cloth, salt fish, spices, meat, and wool."<sup>3</sup>

#### CRAFTS WERE DEVELOPING AS TRADE GREW

Towns like London which were becoming centers of trade were also becoming centers of manufacturing—not manufacturing as we think of it today, in great factories, but the making of goods by hand in the home of the craftsman.

These craftsmen made clothes, implements, weapons, house furnishings—all the things needed by the people of those days,—with the help of apprentices who were learning the trade and of journeymen who had not yet settled down to business for themselves.

<sup>1</sup> Coulton, G. G.: *Chaucer and His England*, G. P. Putnam's Sons, New York, 1908, pages 81-82.

<sup>2</sup> Ibid, page 121.

<sup>3</sup> Warner, George Townesend: *Lamdmarks in English Industrial History*, Blackie and Son, Limited, London, page 59.

Each craft had its own organization or guild and the members of it decided the quality of the goods that could be sold and the prices, and also looked after the welfare of the craftsmen.

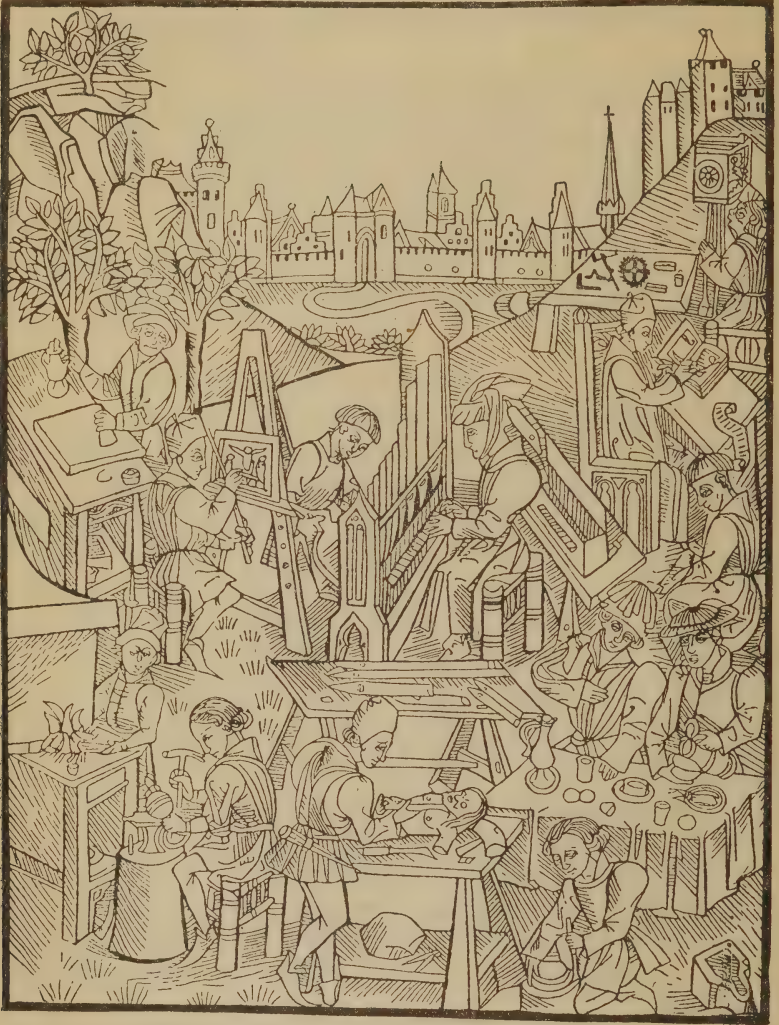


FIG. 23. THE GOLDEN AGE OF CRAFTSMANSHIP

Here we see the goldsmith, the woodsculptor, the painter, the organ builder, the scribe, the clock maker, all craftsman to be found in London in 1470<sup>1</sup>

The following is a description of the industrial system in the Middle Ages: "Employer and labourer are one, the craftsmen works at his craft assisted by apprentices who will in their turn become craftsmen; the retail shop is practically unknown, for every craftsman sells the goods he makes;

<sup>1</sup> *The Survey*, Vol. XLIX, February 1, 1923, New York, page 572.



there is little change in fashion and the demand is steady; large stocks are not made or held; there is not underselling or cutting out of rivals . . . there are no wealthy employers struggling to become still wealthier. On the contrary, townsmen live much the same lives, and aim rather at standing well with their guild than exciting envy by their individual property. Craftsmen work year after year on the same method with the same materials. . . The price of any ware is to be a fair price, fair to the producer and fair to the buyer.

In the thirteenth century, current opinion. . . set strongly against deceit, fraud, and concealment. Neither buyer or seller was to take advantage of the other's necessities, but payment was to be a fair return for the labor expended upon honest work."<sup>1</sup>

"The healthy English and American way of giving a boy a good start and then leaving him to shift for himself was . . . even more common in the 14th century than now. . . The English tradesman (says the author) 'show so little affection toward their children that after having kept them at home till they arrive at the age of seven or nine years at the utmost, they put them out, both males and females, to hard service in the houses of other people, binding them generally, for another seven or nine years.' Thus the children look more to their masters than to their natural parents, and having no hope of their paternal inheritance, set up on their own account and marry away from home."<sup>2</sup>

#### HOW THE PEOPLE OF LONDON LIVED

The gabled timber houses of London we think beautiful but they were not always comfortable in the Middle Ages. On the following page is a plan of a particularly good house of the 14th century. The great hall, open to the roof, the kitchen and storeroom, each with a room above, were barnlike cold rooms in the winter time. It was the custom of those days to go to bed soon after dark, because of the lack of heat and light.

There was a good deal of gayety in London and the rest of England in the daytime in spite of the efforts of the church to stop many of the games and sports.

Here is the description written by a visitor to London of the sports of the day:

"In the holidays all the summer the youths are exercised in leaping, dancing, shooting, wrestling, casting the stone, and practicing their shields; the maidens trip in their timbles, and dance as long as they can well see. In winter, every holiday before dinner, the boars prepared for brawn are

<sup>1</sup> Warner, George T.: *Landmarks in English Industrial History*, Blackie and Son, Limited, London, pp. 60-62.

<sup>2</sup> Coulton, G. G.: *Chaucer and His England*, G. P. Putnam's Sons, New York, 1908, pp. 26-27.

set to fight, or else bulls and bears are baited. When the great fen, or moor, which watereth the walls of the city on the north side, is frozen, many young men play upon the ice; some, striding as wide as they may, do slide swiftly; others make themselves seats of ice, as great as millstones; one sits down, many hand in hand to draw him, and one slipping on a sudden, all fall together; some tie bones to their feet and under their heels; and shovering themselves by a little piked staff, do slide as swiftly as a bird flieth in the air, or an arrow out of a cross-bow. Sometime two run together with poles and hitting one the other, either one or both do fall, not without hurt; some break their arms, some their legs, but youth desirous of glory in this sort exerciseth itself against the time of war.”<sup>1</sup>

May day was a carnival day. May poles were set up in the city and the people rejoiced. Winter was over; the spring had come!

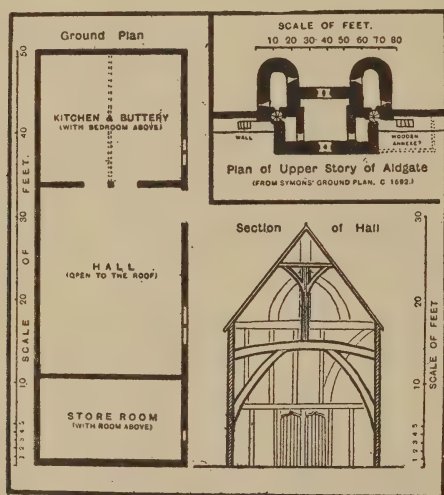


FIG. 24. A TIMBER HOUSE OF THE FOURTEENTH CENTURY<sup>2</sup>

An historian speaks of "these May-day festivities, which outdid even the midsummer bonfires and the Christmas mumming in popularity. . . . When we remember the cold, the smoke, the crowding and general discomfort of winter days and nights in those picturesque timber houses; when we consider that even in castles and manor houses men's lives differed from this less in quality than in degree; when we try to imagine especially the monotony of woman's life under these conditions, doubly bound as she was to the housework and to the eternal spinning wheel or embroidery frame, with

<sup>1</sup> Fits, Stephen's: "*Description of London*," translated by John Stow. From Coulton, G. G.: *Chaucer and His England*, G. J. Putnam's Sons, 1908, page 272.

<sup>2</sup> Ibid, page 97.

scarcely any interruptions but the morning mass and gossip with a few neighbors—only then can we even dimly realize what spring and May-day meant. There was no chance of forgetting in those days how directly the brown earth is our foster mother. Men who had fed on salt meat for three or four months, while even the narrow choice of autumn vegetables had long failed almost altogether, and a few shrivelled apples were alone left of last year's fruit—in that position, men watched the first green buds with . . . eagerness.”<sup>1</sup>

The desire of the people for a good time broke the bounds which were set by the church.

“Hours of labor were long, and for village folk there was no great choice of amusements; yet there is a whole world of delight to be found in the most elementary field sports. . . . The holy days on which the church forbade work amounted to something like one a week; and . . . widespread . . . is the testimony to noisy merriment on them; they bred more drunkenness and crime, we are assured by anxious churchmen, than all the rest of the year. . . .

“Perhaps the most widespread and most natural of all country sports was that of poaching.”

A petition of the Commons to the King in 1389 complained that “artificers and labourers—that is to say, butchers, cobblers, tailors, and other working folk keep greyhounds and other dogs; and at the time when good Christians are at church on holy-days, hearing their divine services, these go hunting in the parks, coney-covers, and warrens pertaining to lords and other folk, and destroy them utterly.” It was therefore enacted that no man with an income of less than forty shillings should presume to keep hunting dogs or implements.

“But in spite of squires and church synods the working man did all he could to escape, in his own untutored fashion from the dullness of his working days. Every turn of life, from the cradle to the grave, was seized upon as excuse for rough and ready sports.

“When a witness wishes to give a reason for remembering a christening on a certain day, he testifies to having broken his leg in the baptismal football match. Bishops struggled against the practice of celebrating marriages in taverns, lest the intending bride and bridegroom should plight their troth in liquor . . . . Similar . . . sports clung to the funeral ceremonies.”<sup>2</sup>

<sup>1</sup> Ibid, page 108.

<sup>2</sup> Ibid, pp. 273-281



So, it is important to remember, that, during the twelfth and thirteenth centuries, London and other English towns were becoming centers of trade and industry in the midst of the old agricultural life of the country. Indeed in 1327 there were in England:

9 towns of over 5000	inhabitants
11 towns of over 3000-4999	inhabitants
19 towns of over 1000-2999	inhabitants
3 towns of less than 1000	inhabitants

London in that year had a population of 37,302, York of 11,597, Bristol of 10,152, Plymouth of 7738, Coventry of 7706, Norwich of 6322, and Lincoln of 5458.

NOT ONLY IN ENGLAND BUT ALSO THROUGHOUT EUROPE  
TOWNS AND CITIES WERE GROWING UP. THE CAUSE  
OF THIS GROWTH WAS INCREASED TRADE  
AND THE DEVELOPMENT OF  
THE CRAFTS

#### 1. THE TRADE CITIES OF ITALY

In Italy there were several cities which because of their position on the Mediterranean had grown to be great sea ports.

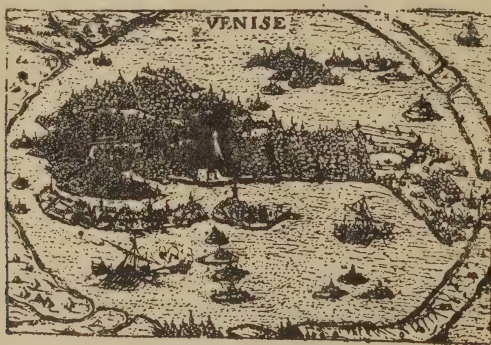


FIG. 25. VENICE<sup>1</sup>

Venice, for example, built on islands, was the largest city in the Middle Ages, with a population of 200,000 people at the end of the fourteenth century! The merchants of this wealthy city had built ships for trade with the Orient and for passengers—those who went to the Holy Lands of Asia Minor.

To Venice came travellers and merchants from all the known world and the city was bright with the costumes of these men of many lands.

<sup>1</sup> Bates, E. S.: *Touring in 1600*. Houghton, Mifflin Company, Boston, opp. p. 52.

The rival of Venice was Genoa. The merchants of this Italian city traded particularly with Tunis in Africa and with the grain regions around the Black Sea.

## 2. PARIS IN THE FOURTEENTH CENTURY

In France, Paris was becoming a city. During the fourteenth century it had over 300,000 inhabitants, engaging in many kinds of work.

Here is a list of occupations carried on in Paris in 1300. It shows you how far Europe had already travelled from the days when there were no important towns and almost all of the people lived in little frightened groups around the lord's castle, tilling their fields year after year.

### OCCUPATIONS AT PARIS IN 1300<sup>1</sup>

#### *Foods, foodstuffs, and by-products:*

- (a) Sellers of wheat, measurers of grain, sellers of flour, sellers of oats, of hay, of forage-stuff.  
Butchers, skinners, measurers of wine.
- (b) Millers, oven-tenders, tripe-sellers.
- (c) Bakers (bread), bakers of various kinds of fancy cakes, pudding-makers.  
Brewers, cooks, poultry-cooks, fried-food sellers, sauce-makers, candle-makers, soap-makers.
- (d) Bakers selling their own product, regraters of bread and other foods, innkeepers, wholesalers of wine.  
Sellers of garlic, of salt, of spices, of herbs, of fruit, of mustard, of milk, of cheese, of oil, of fish, of herring.

#### *Metals:*

- (a) Horse-shoers, blacksmiths, silversmiths, goldsmiths, tinsmiths, coppersmiths, refiners of gold and silver, gold-thread-makers, gold-beaters, workers in hammered copper and tin.
- (b) Makers of plain nails, makers of fancy nails, bolt-makers, button-makers, iron-buckle-makers, brass-buckle-makers, ring-makers, lorimers.
- (c) Cutlers, makers of knife-handles, shears-making, ornamenters of swords, scabbard-makers, chain-makers, fancy-chain-makers, fish-hook-makers, pin-makers, locksmiths, spur-makers.
- (d) Grinders of knives, grinders and mounters of swords.
- (e) Makers of bows, arrows, and cross-bows, arrow-makers, armorers, makers of two kinds of cuirass, of chain mail, of metal plates, shield-makers, helmet-makers.

<sup>1</sup> Adapted from Usher, A. P. "*An Introduction to the Industrial History of England*," pages 66-68, Houghton, Mifflin Company, Boston, 1920.

*Textiles:*

- (a) Wool merchants, hemp merchants, flax merchants.
- (b) Wool-combing and spinning, spinners of silk.
- (c) Weavers of woolens, of linen, of canvas, of tapestry, weavers of silk ribbons, weavers of silk kerchiefs.
- (d) Dyers, calenderers, fullers, shearmen.
- (e) Drapers, sellers of imported canvas, mercers (sellers of silks).

In addition to these there were many special garment-making trades—sewers, tailors, lacemakers, etc.; there were dealers and manufacturers of wooden articles—carpenters, tinnern, coopers. Many building trades were in existence—masons, stone cutters, tile makers, what not. A great multitude of metal working trades was flourishing and the textiles had already had hundreds of years to build up specialties in those lines.



FIG. 26. A PARADE OF NUREMBERG CLOTHMAKERS IN 1722<sup>1</sup>

### 3. THE CITIES OF GERMANY

The towns of Germany, also, became rich and powerful through trade. In the south were the towns through which passed the highways from Italy, and naturally, they became important trading centers. Such towns were Augsburg and Nuremberg.

<sup>1</sup> *The Survey*, Vol. XLIX, February 1, 1923, New York, p. 575.



"Among the towns of the Empire," writes an historian about Augsburg in 1600, "Augsburg was easily first, its finest street was the finest street of Europe, with roofs of copper. . . . The cause of Augsburg's prominence was its being the home of the Fuggers, the greatest financiers of Europe. . . . The frequency of the use of stone as house building material in these towns of Upper Germany and the show of burnished pewter and brass that was the pride of every inhabitant of standing, who let his huge hall-door lie open all day to exhibit it, were details which the average tourist would not overlook."<sup>1</sup>

Then there were important cities in the north on the Baltic and on the North Sea, such cities as Lubeck, Hamburg, Bremen.

An historian describes these towns as follows:

"The towns of the Middle Ages did not at all resemble our modern towns. The houses of the notables were small fortresses; the other resembled the houses of the peasants, having a court yard and granaries. But



FIG. 27. THE RED GATE OF ANTWERP<sup>2</sup>

there were also quarters for the artisans; almost always people of the same occupation were gathered in the same street. There was a 'Tanner Street,' a 'Saddler Street,' etc. Each employer had on the ground floor a shop, which served as a workroom where he worked before the eyes of the public. The second story, where he and his family lived, projected over the street, as if it were trying to join on to the house opposite. In the houses which had several stories, each story extended beyond the one beneath. The house, according to the ancient custom, was usually built of wood and was covered with a peaked roof; often it was ornamented by a gable; a turret or an erker (alcove with windows which projected over the street). In the countries where rain was frequent the erker took the place of the balcony. The houses

<sup>1</sup> Bates, E. S.: *Touring in 1600*, Houghton, Mifflin and Company, Boston, 1911, page 119.

<sup>2</sup> Ibid, opp. p. 272.

which bordered the two sides of the street were not built on a straight line. They formed a slight curve, the street sometimes grew wider, sometimes narrower. The streets were badly paved, full of mud puddles, encumbered with merchandise in the commercial quarters; in others, cows and hogs went about freely. . . . The street was not, as in our time, a place of passage; it was made for those who dwelt in it, not for those who passed through it.

"The town was surrounded by a mote and a rampart of stones; on the wall rose here and there towers, round or square, massive or slender. There were very few towns which did not have hundreds of these towers. They were both a defense and a decoration. . . . The town was a fortress; it was entered only through a vaulted gateway, which was closed at night."

---

#### THE CHANGE FROM THE MANOR TO THE TOWN DID NOT TAKE PLACE WITHOUT A STRUGGLE

As you have learned, the serfs wanted to be free and the lords wanted to keep them serfs.

There was the peasant rebellion which we spoke of earlier. It failed, but during the next century or two the position of serfs in England and on the continent changed.

There were too few serfs to do the work which the lords wanted done. This was even more true after the Black Death which swept over England in the fourteenth century, carrying away about half of the population. The scarcity of serfs meant that the lords had to give better terms to the serfs to keep them on the land or to get new ones. Gradually, as money came to be used more, the serf began to sell his farm produce for money, and to pay the lord for the land instead of serving him and working on his land. This change made him freer of the land than before, and as trade developed the towns, many serfs moved into the towns, and became merchants or craftsmen.

#### THE TOWNS STRUGGLED TO GAIN THEIR FREEDOM FROM THE LORDS

As we have said, the towns grew up, for the most part, around a castle on land owned by the lord. At first the lord treated the townsmen as he treated the serfs—indeed, many of them were his serfs.

But the towns carried on their fight for freedom from the lords and finally won.

---

<sup>1</sup> Seignobos, Charles: *History of Mediaeval and of Modern Civilization*, Charles Scribner's Sons, New York, 1907, pp. 171-172.

Mr. van Loon, the historian, shows how this change often came about:

" . . . Suppose that the Duke of Hildesheim was going to the Holy Land. He must travel thousands of miles and he must pay his passage and his hotel-bills. At home he could pay with products of his farm. But he could not well take a hundred dozen eggs and a cart-load of hams with him to satisfy the greed of the shipping agent of Venice or the inn-keeper of the Brenner Pass. These gentlemen insisted upon cash. His Lordship therefore was obliged to take a small quantity of gold with him upon his voyage. Where could he find this gold? He could borrow it from the Lombards, the descendants of the old Longobards, who had turned professional money-lenders, and who seated behind their exchange-table (commonly known as 'banco' or bank) were glad to let his Grace have a few hundred gold pieces in exchange for a mortgage upon his estates, that they might be repaid in case His Lordship should die at the hands of the Turks.

"That was dangerous business for the borrower. In the end, the Lombards invariably owned the estates and the Knight became a bankrupt, who hired himself out as a fighting man to a more powerful and more careful neighbour.

"His Grace could also go to that part of the town where the Jews were forced to live. There he could borrow money at a rate of fifty or sixty per cent interest. That, too, was bad business. But was there a way out? Some of the people of the little city which surrounded the castle were said to have money. They had known the young lord all his life. His father and their fathers had been good friends. They would not be unreasonable in their demands. Very well. His Lordship's clerk, a monk who could write and keep accounts, sent a note to the best known merchants and asked for a small loan. The townspeople met in the work-room of the jeweller who made chalices for the nearby churches and discussed this demand. They could not well refuse. It would serve no purpose to ask for 'interest.' In the first place, it was against the religious principles of most people to take interest and in the second place, it would never be paid except in agricultural products and of these the people had enough and to spare.

"'But,' suggested the tailor who spent his days quietly sitting upon his table and who was somewhat of a philosopher, 'suppose that we ask some favour in return for our money. We are all fond of fishing. But his Lordship won't let us fish in his brook. Suppose that we let him have a hundred ducats and that he give us in return a written guarantee allowing us to fish all we want in all of his rivers. Then he gets the hundred which he needs, but we get the fish and it will be good business all around.'

"The day his Lordship accepted this proposition (it seemed such an easy way of getting a hundred gold pieces), he signed the death-warrant of his own power. His clerk drew up the agreement. His Lordship made his



mark (for he could not sign his name) and departed for the East. Two years later he came back, dead broke. The townspeople were fishing in the castle pond. The sight of this silent row of anglers annoyed his Lordship. He told his equerry to go and chase the crowd away. They went, but that night a delegation of merchants visited the castle. They were very polite. They congratulated his Lordship upon his return. They were sorry his Lordship had been annoyed by the fishermen, but as his Lordship might perhaps remember he had given them permission to do so himself, and the tailor produced the Charter which had been kept in the safe of the jeweller ever since the master had gone to the Holy Land.

"His Lordship was much annoyed. But once more he was in dire need of some money. In Italy he had signed his name to certain documents which were in the possession of Salvestro dei Medici, the well-known banker. These documents were 'promissory notes' and they were due two months from date. Their total amount came to three hundred and forty pounds, Flemish gold. Under these circumstances, the noble knight could not well show the rage which filled his heart and his proud soul. Instead, he suggested another little loan. The merchants retired to discuss the matter.

"After three days they came back and said 'Yes.' They were only too happy to be able to help their master in his difficulties, but in return for the 345 golden pounds would he give them another written promise (another charter) that they, the townspeople, might establish a council of their own to be elected by all the merchants and free citizens of the city, said council to manage civic affairs without interference from the side of the castle?

"His Lordship was confoundedly angry. But again, he needed the money. He said yes, and signed the charter. Next week, he repented. He called his soldiers and went to the house of the jeweller and asked for the documents which his crafty subjects had cajoled out of him under the pressure of circumstances. He took them away and burned them. The townspeople stood by and said nothing. But when next his Lordship needed money to pay for the dowry of his daughter, he was unable to get a single penny. After that little affair at the jeweller's his credit was not considered good. He was forced to eat humble-pie and offer to make certain reparations. Before his Lordship got the first installment of the stipulated sum, the townspeople were once more in possession of all their old charters and a brand new one which permitted them to build a 'city-hall' and a strong tower where all the charters might be kept protected against fire and theft, which really meant protected against future violence on the part of the Lord and his armed followers.

"This, in a very general way is what happened during the centuries which followed the Crusades. It was a slow process, this gradual shifting of power from the castle to the city. There was some fighting. A few

tailors and jewellers were killed and a few castles went up in smoke. But such occurrences were not common. Almost imperceptibly the towns grew richer and the feudal lords grew poorer. To maintain themselves they were forever forced to exchange charters of civic liberty in return for ready cash. The cities grew. They offered an asylum to run-away serfs who gained their liberty after they had lived a number of years behind the city walls. They came to be the home of the more energetic elements of the surrounding country districts. They were proud of their new importance and expressed their power in the churches and public buildings which they erected around the old market place, where centuries before the barter of eggs and sheep and honey and salt had taken place. . . ."<sup>1</sup>

---

The World Expanded Rapidly as Europe Tried to Get  
in Touch With Other Parts of It—Especially  
With Asia

---

### III.

#### THE LIFE IN THE EAST WHICH TRAVELLERS AND TRADERS FOUND

The merchants and travellers who went to Asia in the twelfth and thirteenth centuries were responsible to a great extent for the changes which came about in Europe, for the growth of trade, the development of towns, and the enlarging of the world for the people of Europe.

You see, Europe during the early Middle Ages was a crude continent of little villages each separated from the rest of the world of warring nobles, of ignorant people both rich and poor.

Asia on the other hand was a land of wealth, of rich agricultural lands, of a great amount of trade, of cities, of markets, of schools, of beautiful buildings.

Perhaps you hear today that China and India and Persia are backward countries!

Well, if you do, remember this. Your ancestors in Europe when they were living in an extremely backward civilization during the Middle Ages learned much from the countries of Asia.

Indeed, the more cultivated people of Asia rather despised the barbarians of Europe in those days. They despised them for the lack of orderly

---

<sup>1</sup> van Loon, Hendrik: *The Story of Mankind*, Boni and Liveright, New York, 1921, pp. 180-183.

government in Europe, for their lack of culture, their drunkenness, and even their uncleanness.

"It was common knowledge among Europeans who stayed at home that they were despised in the East for their carelessness about drainage, and a typical case concerning cleanliness is that recorded of one Englishman. One day he fell overboard. 'Now God has washed you,' said the Turks."<sup>1</sup>

Let us see what the early travellers have to say of the lands of Asia.

#### MARCO POLO, A VENETIAN TRAVELLER OF THE 1200s TELLS OF THE THINGS HE SAW IN ASIA

Late in the thirteenth century Marco Polo, a young man of Venice, his father and his uncle, who were merchants, left Venice and started on a long trip through Asia.

In those days Asia was much safer than it was afterwards for the rule of the Tartar monarchs of Asia was severe. Robbers and highwaymen were less common than in Europe. However, travel was slow on sailing ships and in caravans and it took the Polos three years and a half to reach the residence of Kublai Khan which was near to the place where the city of Pekins now is.

Finally they reached the Court of the Great Kublai Khan who had conquered much of China and Central Asia. He liked Marco Polo and for years the young man served him first in one part of Asia, then another. The story of the travels of Marco Polo are among the most interesting records of the Asia which Europeans were just beginning to know.

#### IN THE MESOPOTAMIAN VALLEY THE POLO FOUND TRADE AND INDUSTRY

Marco writes:

"Bordering upon Armenia, to the southwest, are the districts of Mosul and Maredin. . . . To the north lies Zorzania, near the confines of which there is a fountain of oil which discharges so great a quantity as to furnish loading for many camels. The use made of it is not for the purpose of food, but as an unguent for the cure of cutaneous distempers in men and cattle, as well as other complaints; and it is also good for burning. In the neighboring country no other is used in their lamps, and the people come from distant parts to procure it."<sup>2</sup>

Of the oil in this region you will hear more presently, for it is extremely important today.

<sup>1</sup> Bates, E. S.: *Touring in 1600*, Houghton, Mifflin Co., Boston, 1911, p. 190.

<sup>2</sup> *The Travels of Marco Polo, the Venetian*. Edited by Thomas Wright, Esq., Henry G. Bohn, London, 1854.



Of Mosul he says:

"Mosul is a large province inhabited by various descriptions of people. . . . All those cloths of gold and of silk which we call muslins are of the manufacture of Mosul, and all the great merchants termed Mossuline, who convey spices and drugs, in large quantities, from one country to another are from this province. In the mountainous parts there is a race of people named Kurds. . . . They are all unprincipled people, whose occupation it is to rob the merchants. In the vicinity of this province there are places named Mus and Maredin, where cotton is produced in great abundance. . . . The inhabitants are manufacturers and traders." <sup>1</sup>

Of Bagdad, Marco Polo says it "is a large city, heretofore the residence of the Khalif or pontiff of all the Saracens, as the pope is of all Christians. A great river flows through the midst of it, by means of which the merchants transport their goods to and from the sea of India; the distance being computed at seventeen days' navigation, in consequence of the windings of its course. . . . In Baldach (Bagdad) there is a manufacture of silks wrought with gold, and also of Damask, as well as of velvets ornamented with the figures of birds and beasts. Almost all the pearls brought to Europe from India have undergone the process of boring at this place. The Mohametan law is here regularly studied, as are also magic, physics, astronomy, geomancy and physiognomy. It is the noblest and most extensive city to be found in this part of the world." <sup>2</sup>

#### THE CITY OF SULTANIEH

Another trading center is described by a traveller who went to Asia about 1405. He was the Spaniard, Ruy Gonzales de Clavijo. He tells of the city of Sultanieh in Irak:

"This city of Sultanieh is in a plain and has no wall; but it has a castle with strong walls, and handsome towers, and all the towers and walls are ornamented with patterns, and each tower has a small catapult on the top.

"The city is very populous. . . . Every year, especially in the months of June, July and August, very large caravans of camels arrive, with great quantities of merchandise. . . . This city has a great traffic, and yields a large revenue to the lord. Every year many merchants come here from India, with spices, such as cloves, nutmegs, cinnamon, manna, mace, and other precious articles, which do not go to Alexandria. Also all the silk which is made in Gheelen comes here, and Gheelen is a province near the Sea of Bakou, where much silk is made every year. This silk of Gheelen

<sup>1</sup> Ibid, pp. 37-38.

<sup>2</sup> Ibid, pp. 39-40.

is sent to Damascus, and Syria, and Turkey, and many other countries. Also there arrives all the silk which is made in the province of Xamahi, and merchants come here for silk, even Venetians and Genoese. . . .

"Many precious stones also arrive in the city of Sultanieh. . . .

"All the merchants who come from the land of the Christians, from Caffo, and Trebizond, and the merchants of Turkey and Syria come every year, at this time to the city of Sultanieh, to make their purchases."<sup>1</sup>

The same traveller shows that the inhabitants of the desert regions of western and central Asia lived much as they do today.

### The Nomads of Central Asia

"They (the ambassador and his party) crossed some great plains, where many streams of water were conducted to numerous fruit gardens, and in these plains they found as many as four hundred tents pitched. These tents were not made in the usual way, but they were long and of black cloth, and a people called Alabares lived in them.

"These people do not possess anything but their tents, and they do not live in cities or villages, but in the open plains, as well in winter as in summer. They have large flocks of sheep and herds of cattle, besides twenty thousand camels. They wander, with their flocks and herds, over all the territory of the lord and pay a yearly tribute of three thousand camels and fifteen thousand sheep to him, for the right of grazing in his territory."<sup>2</sup>

### Persia Was An Important Country Then

Persia, in those days, was also an important center for trading, manufacture, agriculture, and herding. Marco Polo says of Persia:

"The country is distinguished for its excellent breed of horses, many of which are carried for sale to India and bring high prices. . . . It produces also the largest and handsomest breed of asses in the world, which sell (on the spot) at higher prices than the horses because they are more easily fed, are capable of carrying heavier burdens, and travel farther in the day than either horses or mules, which can not support an equal degree of fatigue. The merchants, therefore, who in travelling from one province to another are obliged to pass extensive deserts and tracts of sand, where no kind of herbage is to be met with, and where, on account of the distance between the wells or other watering places, it is necessary to make long journeys in the course of the day, are desirous of providing themselves with asses in preference, as they get sooner over the ground and require a smaller

<sup>1</sup> Gonzales de Clavijo, Ruy: *Life and Acts of the Great Tamerlane*; translated and edited by Clements R. Markham; printed for the Hakluyt Society, London, 1859, pp. 93-95.

<sup>2</sup> Ibid, p. 107.

allowance of food. Camels also are employed here, and these in like manner carry great weights and are maintained at little cost but they are not as swift as asses. The traders of these parts convey the horses to . . . places on the coast of the Indian Sea where they are purchased by those who carry them to India. . . In some of these districts, the people are savage and bloodthirsty, making a common practice of wounding and murdering each other. They would not refrain from doing injury to the merchants and travellers, were they not in terror of the eastern Tartars, who cause them to be severely punished. A regulation is also established, that in all roads, where danger is apprehended, the inhabitants shall be obliged, upon the requisition of the merchants, to provide active and trusty conductors for their guidance and security, between one district and another. . . In the cities, however, there are merchants and numerous artisans, who manufacture a variety of stuffs of silk and gold. Cotton grows abundantly in this country, as do wheat, barley, millet, and several other sorts of grain; together with grapes and every species of fruit.”<sup>1</sup>

MARCO POLO FOUND THAT CHINA WAS A LAND OF CITIES,  
MANUFACTURE, TRADE AND AGRICULTURE

“Departing for Ka-chan-fee and proceeding eight days’ journey in a westerly direction, you constantly meet with cities and commercial towns, and pass many gardens and cultivated grounds, with abundance of the mulberry or tree that contributes to the production of silk. . . It is a country of great commerce, and eminent for its manufactures. Raw silk is produced in large quantities, and tissues of gold and every other kind of silk are woven there. At this place likewise they prepare every article necessary for the equipment of an army. All species of provisions are in abundance, and to be procured at a moderate price.”<sup>2</sup>

“OF THE NOBLE AND MAGNIFICENT CITY OF KIN-SAI”—  
THE CAPITAL OF SOUTHERN CHINA

“At the end of three days you reach the noble and magnificent city of Kin-Sai, a name that signifies ‘the celestial city’ and which it merits from its prominence to all others in the world, in point of grandeur and beauty, as well as from its abundant delights, which might lead an inhabitant to imagine himself in paradise. . . According to common estimation, this city is an hundred miles in circuit. Its streets and canals are extensive and there are squares, or market-places, which, being necessarily proportional in

<sup>1</sup> *The Travels of Marco Polo, the Venetian*; edited by Thomas Wright, Esq., Henry G. Bohn, London, pp. 50-51.

<sup>2</sup> *The Travels of Marco Polo the Venetian*; Henry G. Bohn, London, 1854. pp. 248-249.



size to the prodigious concourse of people by whom they are frequented, are exceedingly spacious. It is situated between a lake of fresh and very clear water on the one side and a river of great magnitude on the other, the waters of which, by a number of canals, large and small, are made to run through every quarter of the city. . . .

"On each side of the principal street, already mentioned as extending from one end of the city to the other, there are houses and mansions of great size with their gardens, and near to these, the dwellings of the artisans, who work in shops, at their several trades, and at all hours you see such multitudes of people passing and repassing, on their various avocations, that the providing of food in sufficiency for their maintenance might be deemed an impossibility; but other ideas will be formed when it is observed that, on every market day, the squares are crowded with trades people, who cover the whole space with the articles brought by carts and boats, for all of which they found a sale. . . .

"Amongst the handicraft trades exercised in the place, there are twelve considered to be superior to the rest, as being generally more useful, for each of which there are a thousand workshops, and each shop furnishes employment for ten, fifteen, or twenty workmen, and in a few instances as many as forty under their respective masters."<sup>1</sup>

Asia contained in those days, then, old and important civilizations. Of course, then as now, the poor people of the Asiatic countries were *very* poor and did not have much share in the wealth around them. The manufactures and trade and general industrial development had reached, by the time the Europeans began to know a good deal of Asia, a much higher level than they had reached in Europe.

---

#### EXERCISE

What facts do these earlier travellers give which show the industrial advancement of Asia during the European Middle Ages?

---

#### TRADE INCREASED RAPIDLY AFTER THE ELEVENTH CENTURY

By land and by sea, then, trade increased within Europe and between Europe and Asia.

The towns and cities of Europe grew rapidly, the manufacturing of goods increased, and Europe began to look just a little like modern Europe. The boundaries were widening to include more and more of the world.

---

<sup>1</sup> Ibid, pp. 313-322.

The map marked Fig. 19 shows you how population and therefore trade centered around the Mediterranean during the Middle Ages. It was the great passageway of those days. It was the Middle-Man of the trade.

#### THE TRADE ROUTES OF THE MIDDLE AGES

From the east, particularly India and China, came articles of beauty and luxury; spices, incense, perfumes, precious stones, carpets, and rich clothes. From China there was an overland route to the Black Sea. From India the goods were brought in a number of ways, some through the Black Sea, some up the Persian Gulf and the Euphrates, some up the Red Sea and through Egypt. All the goods from the far east was handled by the merchants of western Asia who shipped it on to the trade cities of Italy, Venice and Genoa, from where it was sent north overland to the cities of Europe. Later, Italian merchants sent ships around past Gibraltar to the ports of England and the Netherlands.

From the north of Europe, the countries on the Baltic, and the North Seas came grain, wool, hides, tallow, salt meat, fish, flax, hemp, timber, furs, and tin. These goods were sent back over the trade routes to the south of Europe and to Asia.

At this time India bought from Europe chiefly horses, linen, and weapons. To western Asia, the Europeans shipped food, grain, oil, honey, lead, iron, steel, tin, sulphur, cloth, leather, wool, soap, furs, and slaves.

As the years went by trade became more general and more varied. The merchants of these centuries made great profits and constantly sought to extend their trade. It was the effort to find new trade routes which led to the travels of Columbus and the other explorers and to the discovery of the "new" world.

#### EXERCISE

Discuss the trade routes of the Middle Ages.

1. What was the general direction of trade?
2. Why was the Mediterranean so important?
3. Why were Italian cities the first to develop into great trading cities.

#### IV.

#### HOWEVER, TRAVEL AND TRADE WERE STILL DIFFICULT AND DANGEROUS

Merchants of those days did not write or telegraph, or cable an order to the place from which they wished to order goods.

It was not so easy as that.

A merchant must himself carry his goods back and forth. Of course the great rich merchants did not do it themselves; they hired other people to do it.

THE PROVERBS OF THE DAY SHOW HOW  
DIFFICULT TRAVELLING WAS

"As for chance remarks: one likens travelling to death insofar as it means separation from friends, letters, moreover yielding as little satisfaction as prayers, and whereas the wise say that death is the entrance to a happier life, there is the opposite prospect with travel, so that it has all the disadvantages of hell as well as of death. And here may follow a few more remarks of theirs, chosen as suggestive of the characteristics of sixteenth century travel insofar as it differs from our own. . . .

"A traveller has need of a falcon's eye, an ass's ears, a monkey's face, a merchant's words, a camel's back, a hog's mouth, a deer's feet. And the traveller to Rome—the back of an ass, the belly of a hog, and a conscience broad as the king's highway.

"Line your doublet with taffetie; taffetie is lice proof.

"Never journey without something to eat in your pocket, if only to throw to dogs when attacked by them . . . .

"At sea remove your spurs; sailors make a point of stealing them from those who are being seasick. Keep your distance from them in any case; they are covered with vermun."<sup>1</sup>



FIG. 28. Dangers of the Northern Seas as the People of the Middle Ages Saw Them<sup>2</sup>

TRAVELLING BY SEA WAS NOT LIKE TRAVEL  
ON A MODERN LINER

This story is told of the travels of Princess Cecily of Sweden who started with her husband to England on November 12, 1564.

<sup>1</sup> Bates, E. S. *Touring in 1600*. Houghton, Mifflin Co., Boston, 1911, pp. 58-59.

<sup>2</sup> *Ibid*, opp. p. 156.



"The voyage took ten months, the winter was a severe one, and much of their way lay through countries whose kings were hostile to her father and the inhabitants to every stranger. Leaving Stockholm while her relatives expressed their opinion about her journey by lamentations and fainting fits, she crossed to Finland in a storm, in which the pilot lost heart to the extent of pointing out the rock on which they were going to be shipwrecked. Finland they left in four days, to escape starvation, during another storm, crossed to Lithuania; thence by land through Poland, North Germany and Flanders to Calais. Even from here it was not plain sailing in any sense of the words; the sea was high when she started; all were sick (with the cruel surges of the water and the rolling of the unsavoury ship), except herself, standing on the hatches, looking toward England. But it proved impossible to get into Dover and they had to turn back.

"'Alas,' quoth she, 'Now must I needs be sick, both in body and in mind,' and therewith taking her cabin, waxed wonderful sick. A second time they tried; and again all were sick but herself; 'she sitting always upon the hatches, passed the time in singing the English psalms of David after the English note and dity.' But again they tried to turn back and again that make her sick. . . . A third attempt was successful."<sup>1</sup>



FIG. 29. A Ship Fitted for a Long Voyage<sup>2</sup>

#### THE DIFFICULTY OF CROSSING THE ENGLISH CHANNEL AND THE BAD CONDITIONS OF THE HARBORS

"In 1610 two Ambassadors waited at Calais fourteen days before they could make a start, and making a start by no means implied arriving—at least, not at Dover; one gentleman, after a most unhappy night, found himself at Nieuport next morning and had to wait three days before another try could be made. Yet another, who had already sailed from Boulogne after having waited six hours for the tide, accomplished two leagues, been becalmed for nine or ten hours, returned to Boulogne by rowing boat, and

<sup>1</sup> Ibid, pages 11-12.

<sup>2</sup> Ibid, opp. 72.

posted to Calais, found no wind to take him across there and had to charter another rowing-boat at sunset on Friday, reaching Dover on Monday between four and five A. M. It was naturally a rare occurrence to go the whole distance by small boat, because of the risk. . . .

"But finishing the crossing by rowing-boat was a very ordinary experience because of the state of the harbours. Calais was the better of the two, yet it sometimes happened that passengers had to be carried ashore one hundred yards or more because not even boats could approach. In 1576 an ambassador to France complains that Dover harbour is in such utter ruin that he will cross elsewhere in future; in 1580 Sir Walter Raleigh procured reform. . . . In time a stone pier was built, small, and dry at low water, as indeed the whole harbour was; the entrance was narrow and kept from being choked up only by means of a gate which let out the water with a rush at low tide."<sup>1</sup>

#### THE DISCOMFORTS OF THE SHIPS

One of the travellers of this period describes the ship voyage in the following words:

"In the gally all sorts of discomfort are met with; to each of us was allotted a space three spans broad, and so we lay one upon another, suffering greatly from the heat in summer and much troubled by vermin. Huge rats came running over our faces at nights, and a sharp eye had to be kept on the torches, for some people go about carelessly and there's no putting them out in case of fire, being, as they are, all pitch. And when it is time to go to sleep and one has great desire thereto, others near him talk or sing or yell and generally please themselves, so that one's rest is broken. Those near us who fell ill mostly died. God have mercy on them! In day-time, too, when we were all in our places busy eating and the galley bore down on the side to which the sail shifted, all the sailors called out 'pando,' that is, 'to the other side,' and over we must go; and if the sea was rough and the galley lurched, our heads turned all giddy and some toppled over and the rest on top of them, falling about like so many drunken yokels. The meals the captain gave us were not exactly inviting; the meat had been hanging in the sun, the bread hard as a stone with many weavels in it, the water at time stank, the wine warm, or hot enough for the steam to rise, with a beastly taste to it; and at times; too, we had to do our eating under a blazing sun."<sup>2</sup>

#### THE DANGER BY SEA FROM PIRATES

"In 1573 the Earl of Worcester crossed with a gold salver as a christening present for Charles IX's daughter; the ship was attacked by pirates;

<sup>1</sup> Ibid, pp. 60-62.

<sup>2</sup> Von Morgenthal, Hans, 1476. From Bates, E. S.: *Touring in 1600*, Houghton, Mifflin Company, Boston, 1911, pp. 67-68.

eleven of his suite were killed or wounded and property worth five hundred pounds stolen. In 1584. . . the French ambassador complained that in the two preceding years English pirates had plundered Frenchmen of merchandise to the value of two hundred thousand crowns; the answer was that the English had lost more than that through French pirates. So in 1600 we find the Mayor of Exeter writing up about the Dunkirkers, 'scarce one bark in five escapeth these cormorants.'"<sup>1</sup>

So we find that although trade was increasing, the difficulties and dangers of carrying goods back and forth from one place to another was so great as to be quite unbelievable to us today.

IF WATER TRAVEL WAS DIFFICULT, LAND TRAVEL  
WAS EQUALLY SO

The roads of those days were very bad and at times almost impossible to travel.

"On the King's highway between Bourges and Lyons the horses of Golnitz and his companions fell into a marsh, whence they were rescued with difficulty; and on another highway Claude Perranth, the architect of the Louvre, speaks of one occasion when night overtook him before he had reached his stopping place; and the holes in the road being so deep as to render it almost impossible for his carriage."

"The following is a tale, that Rivadeneyra, Loyola's boy friend and biographer, tells of some of the other early associates during a walk from Venice to Rome. . . . 'And on Sunday it befell that, having tasted no more than a few mouthfuls of bread that morning they trudge twenty-eight miles of that land in their bare feet; and all the day the rain comes down pitilessly, whereby they find the roads turned into lakes, and that so truly that there are times when the water reaches their chests.'"<sup>2</sup>

Usually merchants and other travellers went on horseback or in coaches. The roads took them through forests and over mountains. And always there was the danger of robbers.

Sometimes these were just ordinary robbers, and sometimes they were nobles who made a living by holding up the people who travelled through their territory. This was a custom which was common both in Europe and in Asia.

The following account tells of a hold-up by a lord in Armenia:

TROUBLES OF TRAVEL (ARMENIA)

"On Wednesday they came to a castle, on a high rock near the road, called Cadaca, on one side of which there was a river, and on the other a

<sup>1</sup> Ibid, p. 73.

<sup>2</sup> Ibid, pp. 285-6.



precipice, and the road led through a very narrow pass, between the river and the foot of the castle rock, so that only one man could pass at a time. A few men in the castle might defend this pass against an army, and in all this country there is no other pass. Men came forth from the castle and demanded a toll from the ambassadors, for their effects. This castle always contains thieves and bad men; and the lord of it is also a thief; and this road is not used except when many merchants travel together, and give a great present to the lord of this land, and to his men.”<sup>1</sup>

ONE OF THE GREAT DIFFICULTIES OF TRAVEL WAS THE SMALL  
POPULATION OF EUROPE AND, AS A RESULT, THE GREAT  
DISTANCES BETWEEN SETTLEMENTS

Europe in the Middle Ages was not, as it is today, a thickly populated region. Only here and there in the midst of the forests were cities and villages.



FIG. 30. Travellers Attacked by Robbers<sup>2</sup>

“The population of London exceeds that of most sixteenth-century states, and there are London suburbs which house more than any but the biggest sixteenth-century cities. Many villages consisted of not more than three or four houses; and even near Paris, of six or seven or eight; in Spain one might journey eight leagues (about twenty-five miles) without seeing a house at all. Whereas, therefore, the difficulty, and the pleasure, of a modern tour consists in escaping from people, the difficulty, and the safety, of all tourists in 1600 lay in reaching them.”<sup>3</sup>

On the chief roads there were, of course, inns for the wayfarers. Sometimes these were uncomfortable and dirty; sometimes they were well-kept;

<sup>1</sup> Gonzales de Clavijo, Ruy: *Life and Acts of the Great Tamerlane*; translated and edited by Clements R. Markham; printed for the Hakluyt Society; London, MDCCLIX, p. 65.

<sup>2</sup> Ibid, opp. p. 354.

<sup>3</sup> Ibid, pp. 101-102.

but always the travellers who had come a long distance on horseback were grateful for them.

This picture shows the usual method of packing the guests of the inns into dormitories.



A Hostelry at Night<sup>1</sup>

IN SPITE OF ALL THE DIFFICULTIES THE MERCHANTS  
CARRIED ON A CONTINUALLY INCREASING TRADE  
OVER THE FACE OF THE KNOWN WORLD

The merchants found various ways of meeting the difficulties in the way of trade. They usually travelled in companies, and they often formed organizations to protect themselves and to benefit their trade.

The Hanseatic League Was Such An Organization

"In those times commerce was carried on only with arms in the hands. The merchant had to defend his ships and his merchandise while en route, and to make himself respected in the marts of trade. In order to be stronger, the merchants of the commercial towns formed an association. Their league was called the Hanseatic League. One by one all the towns in Northern Germany from the Baltic to the Low Countries become members of it; there were eighty of them in the sixteenth century, extending from Riga in the East to Bruges in the West. In each port of Sweden, Norway, and Russia the League had a mansion, a veritable fortress, guarded by a band of armed employees, all unmarried, organized as a guild, with a master, journeymen and apprentices. No stranger was allowed to go through the building and at evening the watch dogs were turned loose. The building served as a storehouse for merchandise, a market, and a tribunal. Each year great

<sup>1</sup> Coulton, G. G.: *Chaucer and His England*, G. P. Putnam's Sons, New York, 1908, p. 139.

ships laden with linens and cloths from Flanders, spices and silks from the Orient, departed from the Hanse towns; these ships armed for war had their complement of soldiers, their decks were defended by two strong forts made of wood. They arrived at the foreign ports, at Bergen, Riga, or Novgorod; the merchants took lodgings within the walls, unloaded and put on sale their goods. . . . Then the ships set out again, laden with woods, wax, skins, and especially with dried fish."<sup>1</sup>

---

#### EXERCISE

Make two columns headed "Trade In the Middle Ages" and "Trade Today." In one column make a list of facts about the trade of the Middle Ages and in the second column another list showing the facts about modern trade. We give you one example.

##### TRADE IN THE MIDDLE AGES

Goods were carried on horseback,  
in wagons, and on sailing vessels.

(2) .....

##### TRADE TODAY

Goods are carried today chiefly  
by train, automobile and steamship.

(2) .....

#### V.

##### FAR PARTS OF THE WORLD WERE COMING CLOSER TOGETHER

We have seen that the world of most men and women in Europe during the Middle Ages was limited by the boundaries of the manor. There they lived in little communities, almost independent of the rest of the world. They raised their own grain and stock; they ground their own flour; they spun and wove their own thread; they made their own shoes. They produced most of the things they needed.

Then the world began to change. As people wanted to buy and sell more, people manufactured more things and towns grew. The narrow world of the Middle Ages was breaking down. The parts of the world were coming closer together, coming to depend upon each other more and more.

But still the world of those days was primitive. The method of making things by hand, the difficulties of trade and travel, the scattered population—all these, as we shall see, were very different from the conditions we know in a modern industrial country.

---

<sup>1</sup> Seignobos, Charles: *History of Mediaeval and of Modern Civilization*, Charles Scribner's Sons, New York, 1907, p. 169.



## TEST ON SECTION II.

I. Mark off on the time line the period of time that you have in mind when you read the phrase: "The narrow world of the Middle Ages."



II. Show by checking the proper regions and places in the following list which parts of the world the traders and travellers of the period 1200-1400 knew.

- |                           |                       |
|---------------------------|-----------------------|
| 1. The Philippine Islands | 11. India             |
| 2. Bagdad                 | 12. Egypt             |
| 3. Brazil                 | 13. Canada            |
| 4. The Mediterranean Sea  | 14. Venice            |
| 5. China                  | 15. South America     |
| 6. Boston                 | 16. France            |
| 7. The English Channel    | 17. Germany           |
| 8. North America          | 18. Asia Minor        |
| 9. London                 | 19. The United States |
| 10. Gulf of Mexico        | 20. Australia         |

III. Check the number that you think more nearly approximately the population of Europe in the Middle Ages: less than 1,000,000; 1 to 5 million; 1,000,000,000.

IV. Villages in Europe in the Middle Ages consisted of about: 3-10 houses; 100 houses; 1,000 houses. (Underscore correct amount.)

V. Write in this column statements of the Ways People Lived on the Manor. One example is given.	Write in this column opposite the appropriate items the ways people live today in farming communities that are like the ways they lived in the manor.	Write in this column any ways people live today that are different from the ways of life in the manor.
(1) Example—They divided their land into strips one man farming strips, in different parts of the manor.	(1) In parts of Europe today they still farm in strips.	(1) In the United States today farmers have large broad fields?
(2) -----	(2) -----	(2) -----

VI. Write in this column statements of the ways people lived in towns of Europe from 1200-1400.	Write in this column, opposite each item of column No. 1, a statement of ways people live today in America which were like those in the towns of 1200-1400.	Write in this column, opposite each item a statement of ways people live today in American towns that are different from the ways of life in towns of 1200-1400.
(1) Example — The streets of the town were very filthy and dangerous.		(1) Most streets in American towns are clean and safe.
(2) -----	(2) -----	(2) -----

### VII. Most people in the Middle Ages: (Check the correct statements.)

1. were freemen
2. could vote
3. were independent of other people even in their own village.
4. worked for wages
5. could not leave the place where they lived
6. owned their own property
7. had nothing to say about who they worked for
8. could not help choose their governors
9. knew much about the world beyond their village
10. had travelled to great cities
11. worked for themselves
12. had many conveniences and comforts
13. paid their way by giving service to a lord
14. were serfs

### VIII. The manor generally: (Check the correct statements.)

1. was a community of a thousand or more people
2. produced practically all the food and goods that it needed
3. had well-kept streets and lawns
4. had few sanitary conveniences
5. was owned largely by a rich man
6. had quick connection with other manors and with towns
7. was made up mostly of poor people who barely existed
8. was composed of five brick and stone buildings
9. was a democratic, self governing community
10. was self sufficient
11. was isolated from other communities
12. was a cooperative community

IX. "What is Trade?" Here are some statements that help to explain what trade is in the modern world today.

1. Steamships carrying coal, iron, wheat, lumber and manufactured goods from port to port and country to country.

2. Wholesale and retail stores.
3. Manufacturing corporations.
4. Mining companies.
5. Railroads carrying produce from place to place.

Write as many statements as you can that will help explain what trade was in the Middle Ages, say 1200-1400.

X. In the Middle Ages the very large cities of Europe were \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_, and they had populations of about \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_, respectively. Most cities and towns, in 1200-1400, however, did not exceed \_\_\_\_\_ in population. (Fill in the blanks.)

XI. The travellers and traders who went to Asia Minor and the Orient in the 1200's and 1300's were mainly responsible for the expansion of life in Europe, because:

(List three reasons).

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

XII. Mosul oil, which we are hearing so much of today, was known about in the 1200's. How do we know that that was true? \_\_\_\_\_

XIII. State the greatest difference between the craft occupations of the Middle Ages and those of today. \_\_\_\_\_

XIV. The people of Asia in 1200 A. D. looked down on the Europeans. State reasons for this that you know.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

XV. "However travel and trade were still difficult and dangerous, even by 1600."

Write at least 10 phrases which will help explain the truth of this statement. We give two examples: (1) rough seas; (2) danger from pirates;

#### BOOKS FROM WHICH YOU CAN GET ADDITIONAL INFORMATION ON THE NARROW WORLD OF THE MIDDLE AGES

- Atherton, Edward, Editor of: *The Adventures of Marco Polo, The Great Traveler*, D. Appleton & Company, New York, 1902.
- Beard, C. A., and Bagley, W. C.: *Our Old World Background*, The Macmillan Company, New York, 1923.
- Guerber, H. A.: *Legends of the Middle Ages*, American Book Company, New York, 1896.
- Guerber, Helene A.: *The Story of the English*, American Book Company, New York, 1898.



- Hall, Jennie: *Our Ancestors in Europe*, Silver, Burdett and Company, New York, 1916.
- Harding, S. B., and Harding, W. F.: *The Story of England*, Scott, Foresman and Company, Chicago, 1909.
- Harding, S. B., and Harding, W. F.: *The Story of the Middle Ages*, Scott, Foresman and Company, Chicago, 1901.
- Lamprey, L.: *In the Days of the Guild*, Frederick A. Stokes Company, New York, 1918.
- Lamprey, L.: *Masters of the Guild*, Frederick A. Stokes Company, New York, 1920.
- Lanier, Sidney, Edited by: *The Boy's Froissart*, Charles Scribner's Sons, New York, 1917.
- Lansing, M. F.: *Barbarian and Noble*, Ginn and Company, Boston, 1911.
- Lansing, M. F.: *Patriots and Tyrants*, Ginn and Company, Boston, 1911.
- Nida, W. L.: *The Dawn of American History in Europe*, The Macmillan Company, New York, 1914.
- Stories of the Middle Ages*. Retold from St. Nicholas, The Century Company, New York, 1917.
- Tappan, E. M.: *England's Story*, Houghton, Mifflin Company, New York, 1901.
- Tappan, E. M.: *European Hero Stories*, Houghton, Mifflin Company, Boston, 1909.
- Tappan, Eva March: *When Knights Were Bold*, Houghton, Mifflin Company, Boston, 1911.
- Thatcher, O. J.: *Europe in the Middle Ages*, Charles Scribner's Sons, New York, 1920.
- Thatcher, O. J.: *A Short History of Mediaeval Europe*, Charles Scribner's Sons, New York.
- Van Loon, Hendrick: *The Story of Mankind*, Boni and Liveright, New York, 1921.
- Wright, Thomas, Esq., Edited by: *The Travels of Marco Polo, the Venetian*, Henry C. Bohn, London, 1854.

### SECTION III.

## HOW ENGLAND BECAME THE PIVOT OF WORLD TRADE AND THE CENTER OF A GREAT EMPIRE

### I. THE ROAD SHE HAS TAKEN SINCE THE MIDDLE AGES



FIG. 31. THE THAMES<sup>1</sup>

### A Little Country That Is Master of One Fourth of the World

"I tell you, England wouldn't last a month if we stopped shipping goods to her. That little island! Why, look at the size of her—not as large as this state of Kansas; and look at the way she's fixed—depends on other countries for nearly everything she uses."

The proprietor of the Paola House in Paola, Kansas, settled back complacently in his arm after these few remarks with an air of having completely demolished his opponents' arguments about England. Four typical Yankee travelling salesmen, marooned over a hot week-end in this small town hotel, were sitting alongside of the proprietor with their feet over the shining rail before the large plate-glass window fronting on the square.

<sup>1</sup> Besant, Walter: *East London*, The Century Co., New York, 1901; opp. p. 74.

Presently a distinctly foreign voice broke the silence, its owner pulling a chair up and adding his two feet to the row on the shining rail. "Do you know, sir, that 'little' England is the greatest trading nation in the world, that she exports more coal than even the United States? Do you know that for three hundred years she has been the greatest manufacturer of woollen goods in the world? That she has more than thirty million sheep right now? Did you ever get a glimpse of one of those maps where the number of sheep are shown by dots—one dot for every 200,000? Well, England looks like someone had spilt a bottle of ink on her—it takes that many dots to show the number of sheep she has! [Do you see how Fig. 32 shows this?] Did you know that since the War she has picked up on her iron and steel trade until now she exports more than the United States—and this in spite of the fact that the War nearly knocked us completely out?"



FIG. 32. The Map to Which the Englishman Referred when He Spoke of England as a Great Sheep Raising Country.<sup>1</sup>

"Yes, that's all right," came from one of the salesmen, "England's got lots of cloth and steel mills, but"—triumphantly—"you can't eat wool and steel. What about wheat and corn and meat? Why I understand that the British Isles together don't raise one fourth of the wheat they need to keep their people alive!" (Was he right? Can you tell from Fig. 33?)

"That's true enough, our United Kingdom depends on other parts of the world for food. If we should be completely blockaded, we'd be starving in a month. We probably haven't got a month's food supply in England right now. And right there, men, is one of the reasons why we're not giving

<sup>1</sup> Finch & Baker: *Geography of the World's Agriculture*, U. S. Department of Agriculture; 1917.



Ireland her independence. If an attempt should be made to blockade us, it's a fine position we'd be in with submarines running in and out of Ireland's hundreds of bays and inlets! But let me tell you, it's pretty difficult to carry through a blockade. You'd never do it, and you know why—England's navy. The greatest navy in the world!"

"You're right there," broke in one of the salesmen, "England's been Mistress of the Seas for three hundred years—ever since she licked the Spanish Armada. I knew enough of history for that."

"Sure," the proprietor, still unconvinced, came back, "sure. But we're not talking about war—about absolute blockades. We're talking about not trading with England, and I say she couldn't live a month without the trade of other nations. Suppose Argentina should decide not to ship wheat to you, and to buy our coal instead of yours—we *could* sell her what she needs, you know. Suppose she should—what would you do? Suppose that Russia—the Ukraine—should not send you any wheat either. What would you do? And, to clinch the argument, you know perfectly well that England doesn't raise a pound of cotton, don't you, for all the millions of yards of cloth that she manufactures, uses, and sends abroad each year.

"Yes," the Englishman agreed with a smile, "yes, not a pound. We bring it all in from the outside."

"Well, then, how can you think England would outlast a trade boycott—an embargo? We wouldn't have to blockade her; we could simply stop trading with her. You know the people who favor the League of Nations say that's the best way to make a country come to time—just stop trading with her, and soon she'll have to do as the other countries think she ought to."

"That theory wouldn't work in the case of England, my dear fellow. You'd have to defeat her navy first. You know England's got colonies and ships. She doesn't need to trade with other countries—that is, foreign ones. Every foreign ship in the world could refuse to sail into a British port, and we could still secure the food and cotton and other things we need to keep going. Are you surprised? You needn't be. Don't forget our great merchant marine. Do you realize that Great Britain has more tons of ships and cargo sailing under her own flag than any other country in the world? Yes, we are Mistress of the Seas because we have both a great navy and the greatest merchant marine."

"But," insisted the proprietor, "if a trade embargo was declared against you, your ships couldn't get into the ports of other countries to get the goods."

Again the quiet smile came over the confident Englishman's countenance. "Oh, ho! by 'other countries' you mean foreign countries; their ports of course would be closed to us. But you forget that we control ports in nearly every quarter of the earth. We can get cotton from India and cotton

from Egypt—both our colonies—by millions of bales; wheat from Bombay and Calcutta—also England's own—millions of bushels,—not as good wheat as Argentina's or Russia's or yours in Kansas and the Dakotas, but good enough to get along on in a pinch. We could get wheat and cattle from Australia, too, and spices, tea, rubber for our great rubber factories from China. Why, men, London is the most important trading city in the entire world for the rubber, tea, spices, jute, and such oriental goods that come from certain ports in China. And did you realize that the great port of Hong Kong, among others, is under England's control although China is way on the opposite side of the earth—21,000 miles away!"

A chorus of objections met his astonishing statements. Unperturbed, he went on:

"You are astonished? You do not think it possible? But it is true, every bit. It wasn't true a hundred years ago, but since then a great change has come about in "proprietorship" in the different parts of the earth. Today England is master and controls one fourth of the territory of the whole world. And more than 400 million people—one fourth of the entire population of the earth—are governed under the British flag."

*The Englishman was right.* England has a great Colonial Empire—that is, great tracts of land all over the world which she controls. From these lands, from Canada, Australia, India, and the other colonies she brings food for the hungry workers in her cities, from these colonies she brings raw materials, such as cotton and metals, for her factories.

*But the Englishman was also wrong.* The British Empire can not live successfully by itself. A great part of England's trade—the bringing in of goods and the sending out of goods—was with other great industrial countries—such as Germany and the United States. England was and is still, the center of a great flow of goods from other industrial countries and the colonies, and to other industrial countries and the colonies.

England is so closely connected with the whole world that shutting off trade with any part of the world would upset the whole country. Indeed, we shall see how the industrial system in England has been upset by that very thing as a result of the World War.

---

AN IMPORTANT EXERCISE FOR YOU TO DO BEFORE YOU READ  
HOW ENGLAND GREW INTO THE BRITISH EMPIRE

LEARN THE NAMES WE USE IN SPEAKING OF THE BRITISH  
EMPIRE AND ITS PARTS

On a wall-map of the world find these parts of the British Empire:

1. The British Isles: the two islands.
2. England: This the southern part of the larger island. This is the real center of manufacturing and trade and government in the whole

British Empire. It was the first part of the islands to become industrial—that is to build factories and railroads and in which large manufacturing cities grew up. England is now by far the most industrialized of all the parts of the Empire.

3. Wales: The little patch on the west of England. There are a good many factories and cities in Wales but not so many as in England proper. Notice how small Wales is compared with England.
4. Scotland: The northern part of the larger island. Notice where the boundary line falls between Scotland and England and notice that Scotland is somewhat smaller than England, but larger than Wales.
5. Great Britain: England, Scotland and Wales. This term is used very commonly.
6. Ireland: The smaller island. In the southern part the people are mostly farmers. In the north there is some manufacturing.
7. The United Kingdom: This includes all four parts of the British Isles, England, Scotland, Wales, and Ireland.
8. The British Empire: The United Kingdom and all the colonies such as Canada, India, Australia, New Zealand, and great parts of Africa. We shall study next the extent of the Empire.

#### WHAT IS THE BRITISH EMPIRE? A VAST TERRITORY STRETCHING AROUND THE EARTH

The next map, Fig. 33, pictures its vastness.

Every shaded region on that map of the world belongs to England! Together the territories form the world's greatest empire—the British Empire.

What an immense territory to belong to one little island! Let us name just the larger parts, starting from the British Isles and going south and east around the earth: Egypt, the Union of South Africa and other huge regions of Africa; Mesopotamia, India, Australia, Canada.

How tiny the British Isles are in comparison to these great colonies. And little England controls them all!

#### AN INTERESTING EXERCISE TO SHOW HOW SMALL ENGLAND IS COMPARED TO THE COLONIES OF WHICH IT IS MASTER

1. Lay a sheet of thin paper over a wall-map of the world and trace the boundaries of *England*.
2. Cut out the area enclosed.
3. On another sheet of paper trace the boundaries of the following



- colonies of the Empire: (1) The African Colonies (See Fig. 34); (2) India; (3) Australia; (4) Canada.
4. Cut these areas out and paste them together so that they form one fairly continuous area.

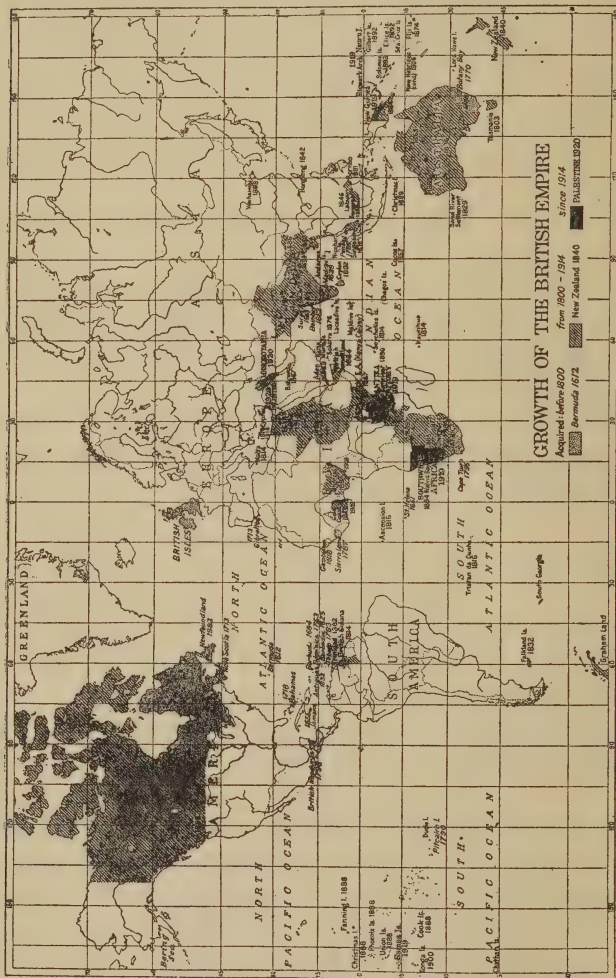


Fig. 33. The British Empire Today<sup>1</sup>

5. Lay the tracing of England over that of these colonies. About how many times could the area of England be included in that of these colonies? Each pupil in your class should do this.
6. On the blackboard make a table of the answers obtained. What is your conclusion now? How many times larger than England are her principal colonies?

<sup>1</sup> Bowman, Isaiah: *The New World*, World Book Company, Yonkers, N. Y.; 1921.

TO MAKE THE COMPARISON ACCURATE MAKE A TABLE  
OF THE AREAS OF THE FOLLOWING PARTS  
OF THE BRITISH EMPIRE:

From the appendix to this pamphlet find the number of square miles  
of territory in each part.

England .....	}	Canada .....
(Number of Square Miles)		India .....
The United Kingdom .....		Australia .....
		The African Colonies .....
		Total .....
		(Area of these Colonies)

How many times larger than England is the total area of these principal  
colonies?

How many times larger is it than that of the United Kingdom?

Even Canada alone is many times larger than are the British Isles;  
Fig. 34 pictures the two regions.



FIG. 34. The British Isles and Canada—the Colony Many Times Larger  
Than the Governing Country.<sup>1</sup>

NEARLY ONE FOURTH OF THE PEOPLE OF THE EARTH  
LIVE WITHIN THE BRITISH EMPIRE

It is not only because of its large territory that the British Empire is  
important for us to study. Her population is huge, too.

<sup>1</sup> *Our World*, November, 1922; New York, p. 68.

Turn back to Fig. 1 the population map of the world. Study that in comparison with Fig. 33, the map of the British Empire.

In all the British Empire two black regions stand out on that map—first, the British Isles (especially England) and second, India.

Notice how black England is, especially the southern part. Can you imagine the city of London with its five million people in the heart of the blackest portion? And Liverpool and Manchester and Sheffield and Leeds and Birmingham with several million more? And many, many, smaller cities, and towns, and villages?

England makes such a black smudge on the map because 47,000,000 people live there!

Notice this comparison:

England has 88,000 square miles and a population of..... 47,000,000

United States has 3,027,000 square miles and a population  
of..... 105,000,000

The United States has thirty times as much territory, but only about twice as many people!

Do you begin to understand how crowded England is?

India is the other great black spot within the British Empire. Notice it again on Fig. 33.

312,000,000 people live in India. Seven times as many people as in the British Isles—the governing country.

There is only one other great region in the world where so many people live crowded together. That region is China.

What about Canada, Australia and the African colonists? Do many people live there—that is, many compared with India or with England?

Look up the population of each in the Appendix of the pamphlet and make a blackboard comparison of them and the population of England and India.

Finally, compare the total population of the British Empire with that of England.

Look up the population of each in the Appendix and write it on the blackboard.

What part of all the people of the earth live  
within the British Empire?

How could a little group of islands become master of such an enormous territory and of so many peoples scattered all over the earth? No story is more important or more interesting than that one. It all happened because England became a great manufacturing and trading nation. To the fascinating story of how it happened we will now turn.



**FOUR IMPORTANT MATTERS WILL BE STUDIED IN THIS  
AND IN THE NEXT THREE SECTIONS**

*First:* How England Changed from the England of Manors to Modern Industrial England.

*Second:* The Changes that the Industrial Revolution Made in the Way People Lived.

*Third:* How England Became the Greatest Trading and Shipping Nation in the World.

*Fourth:* How Little England Took Lands and Peoples all Over the Earth and Formed the British Empire.

**YOU WILL WISH TO KEEP CAREFUL NOTES OF THE IMPORTANT  
POINTS ABOUT THESE FOUR MATTERS**

After you have read the rest of this section make a list of the important points in the way England became an industrial nation. You will wish to do the same thing for the other three matters; they are taken up in Sections IV, V and VI. Start a separate section in your notebook for notes on each of these four points.

**I. HOW ENGLAND CHANGED FROM THE ENGLAND  
OF MANORS TO THE MODERN INDUSTRIAL ENGLAND**

Four out of every five people of modern England live in a city. Four out of every five make their living by working in a factory or a store or in transportation or something other than farming. Only one out of five helps produce the food of the country.

What a contrast to the way things were in the Middle Ages?

In the Middle Ages, we learned in the last section, practically every one farmed. On the manors of England each villein and cotter cultivated his strips of land scattered over the unfenced fields of the manor. Very few people were craftsmen.

How did such a startling change come about in England?

**THE FIRST STEP IN THE CHANGE CAME WHEN THE WEALTHY  
LAND-OWNERS TOOK THE "COMMON" LAND  
AWAY FROM THE PEASANTS**

Do you remember the way in which the manor system began to break down and towns began to grow as trade developed?

The great landowners, or lords, found it hard to get men to work the land after the Black Death had taken away a large proportion of the popu-

lation and as the villeins began to break away and go to the towns. The landowners, therefore, had to give better terms to the men who came to work on the manor.

They even permitted the people on their land to pay rent instead of services, thus freeing them from their serfdom and making them peasants who rented land in much the same way as renting farmers do in our country today. The lords also had to pay more for the work they hired peasants to do on their own land. Of course, they did not like this, because they wished to get people to work for them for as little as possible.

But they found a way to make more money at the expense of the peasants. And what they did changed England's history: they fenced in the "common lands" of the manors and prevented the peasants from using them.

It was the "common" land on the manors that had made it  
possible for the peasants to get a living  
from the soil.

Turn back to the picture of the manor in Fig. 20.

Do you see the fields with their cows and horses behind the cottages of the village? The ones marked "common pasture?" Notice in other parts of the manor the "waste" places. These were "common," too; that is, the pastures and the wastes were for the common use of every one on the manor.

The law of England said, of course, that the Lord of the Manor owned even the "common" lands. Nevertheless, for hundreds of years the peasants had had free use of the "common." Without it they could not have produced a living from the soil.

On the manors "people derived the necessities of life from the . . . soil of their own countryside. . . . The cow keeping, the bread making, the fattening of pigs and curing of bacon, were carried on here, . . . besides other things such as turf-cutting on the heath and wheat growing in the gardens. *But it was the common that made all this possible.* It was only by the spacious 'turn out' which it afforded that the people were enabled to keep cows and get milk and butter; it was only with the turf-firing cut on the common that they could smoke their bacon, laying it in the wide chimneys over those old open hearths where none but such fuel could be used; and, again, it was only because they could get furze from the common to heat their bread ovens that it was worth their while to grow a little wheat at home, and have it ground into flour for making bread. . . . The very heart of the system was the open common."

What a calamity it was then to the peasant to be fenced out of his "common"!

Why did the Land Owners Fence the Common lands?

To make money out of sheep raising which was  
very profitable.

The rich landowners turned much of the enclosed land which they had taken from the poor villagers into pasture for sheep grazing, because sheep were profitable for their wool and their flesh, and also because little labor was necessary for their care. They could hire one shepherd to take care of a great flock of sheep, whereas if the same land were used for crops, many farm laborers would have to be employed.

Thus England became a great sheep raising country. Of course this did not take place all at once. It took more than a hundred years for the full results of the "enclosures" of the common lands to show themselves. Early in the 1500s this custom began and was still going on in the 1700s. The landlords did not use all of the land for sheep raising. Some of it they cultivated, raising wheat, oats, barley or other products. For this work they used hired labor. New farming methods were introduced and larger crops were raised than had been raised under the old methods.

But what did the villagers who had been deprived of their lands do?

Well, of course they suffered a good deal of hardship. In the end they became hired laborers of some big landowner or drifted to the towns and became town workers. Sometimes a whole village was deserted, sometimes part of the villagers would remain, working perhaps part time on the little bit of land left them and part time for the landlord for wages. Or perhaps they would spin and weave cloth in the cottage, and so make a living.

Here is a description which shows how the enclosing of the common, that is, the wood, waste, and pasture land, gradually changed a little agricultural village into a village of wageworkers who worked not on their own bit of land, but on the landlord's land for wages. It shows the way in which England changed during these centuries from an agricultural country to a country of industries and cities.

#### ENCLOSURES CONTINUED EVEN IN THE 1800s

#### THIS STORY SHOWS HOW A VILLAGE WAS CHANGED BY THE ENCLOSURE OF THE COMMON IN THE MIDDLE OF THE LAST CENTURY

"... The village dies where it stands. . . . A faint influence from out of the past still has its feeble effect; but, in this corner of England at least, what we used to think of as the rural English are, as it were, vanishing away—vanishing . . . by becoming somehow different in their outlook and habits. The old families continue in their old homes; but they begin to be a new people.



"Under the manor system the common people lived in the main, upon what their own industry could produce out of the soil and materials of their own countryside. A few things, certainly, they might get from other neighborhoods, such as iron for making their tools, and salt for curing their bacon; and some small interchange of commodities there was, accordingly, say between the various districts that yielded cheese, and wool, and hops, and charcoal; but as a general thing the parish where the peasant people lived was the source of the materials they used, and their well-being depended on their knowledge of its resources. Among themselves they would number a few special craftsmen—a smith, a carpenter or a wheelwright, a shoemaker, a pair of sawyers, and so on; yet. . . the people . . . with their own hands raised and harvested their crops, made their clothes, did much of the building in their homes, attended to their cattle, thatched their ricks, cut their firing, made their bread and wine or cider, pruned their fruit trees and vines, looked after their bees, all for themselves—and some at least, and perhaps the most of these economies were open to the poorest laborer. Though he owned no land, yet as the tenant, and probably the permanent tenant, of a cottage and garden he had the chance to occupy himself in many a craft that tended to his own comfort. A careful man and wife needed not to despair of becoming rich in the possession of a cow or a pig or two, and of good clothes and household utensils; and they might well expect to see their children grow up strong and prosperous in the peasant way. . .

"This life of manifold industry was interesting to live. It is impossible to doubt it. Not one of the pursuits I have mentioned failed to make its pleasant demand on the labourer for skill and knowledge; that so that after his day's wage-earning he turned to his wine-making or the management of his pigs with the zest that men put into their hobbies. . . In the elaborate tile work of old cottage roof, in the decorated iron work of decrepit farm wagons, in the carefully fashioned field-gates—to name but a few relics of the sort—many a village of Surrey and Hampshire and Sussex was ample proof that at least the artisans of old time went about their work placidly. . . The cottage crafts were not all strictly useful. . . If you doubt it, look merely at the clipped hedges of box and yew in the older gardens; they are the result of long and loving care, but they serve no particular end, save to please the eye. . .

"One usually thinks of the enclosure of a common as a procedure which takes effect immediately, in striking . . . change; yet the event in the village seems to have made no lasting impression on people's minds. The older folk talk about things that happened 'before the common was enclosed' much as they might say 'before the flood' . . . but one hears little from them to suggest that the fateful ordinance seemed to them a fateful one at the time. . .

"Had sudden distress fallen upon the valley, had families been speedily . . . ruined by the enclosure, some mention of the fact would surely have reached me. But the truth appears to be that nothing very . . . striking ensued, to be remembered. The change was hardly understood, or, at any rate, its importance was not appreciated by the people concerned. . .

"The passing of the common seemed unimportant at the time . . . because the real disadvantages were slow to appear. . . . Not more than ten or twelve years ago, there were abundant patches of heath still left open. . . . One may judge how slowly the change began—slowly, . . . so that those who saw the beginning could almost ignore it. Even the cows—once as numerous as the donkeys—were not given up quite immediately, though in a few years they were all gone, I am told. But long after them, heath for thatching and firing could still be cut in waste places; . . . and since these things still seemed to go on almost as well after the enclosure as before it, how should the people have imagined that their ancient mode of life had been cut off at the roots, and that it had already begun to die where it stood? . . .

"Nevertheless, that was the effect. To the enclosure of the common more than to any other cause may be traced all the changes that have . . . passed over the village. It was like knocking the keystone out of an arch. The keystone is not the arch; but, once it is gone, all sorts of forces . . . begin to operate towards ruin, and gradually the whole structure crumbles down. This fairly illustrates what has happened to the village in consequence of the loss of the common. . .

"Accordingly, when the enclosure began to be a fact, when the cottager was left with nothing to depend upon save his garden alone, as a peasant he was a broken man—a peasant shut out from his countryside and cut off from his resources. He might still grow vegetables and keep a pig or two, to provide himself with pork; but there was little else that he could do in the old way. It was out of the question to obtain most of his supplies by his own handiwork; they had to be procured, ready made, from some other source. That source, I need hardly say, was a shop. So the once self-supporting cottager turned into a spender of money at the baker's, the coal merchant's, the provision dealer's; and, of course, needing to spend money, he needed first to get it.

". . . To a greater or less extent most of the villagers were already wage earners, though not regularly. Now, the need to earn became more insistent, when so many more things than before had to be bought with the wages . . . unemployment became a calamity. Every hour's work acquired a market value. The sense of taking part in time-honoured duties of the country side disappeared before the idea—so very important now—of getting shillings with which to go to a shop; while even the home industries . . .

began to be valued in terms of money, so that a man was tempted to neglect his own gardening if he could sell his labour in somebody's else's garden. Thus undermined, the peasant outlook gave way . . . to that of the modern labourer, and the old attachment to the countryside was weakened. In all this change of attitude, however, we see only one of those results of the enclosure of the common. . . .

"Every week money has to be found, and not only, as of old for rent and boots, and for some bread and flour, but also for butter or margarine, sugar, tea, bacon or foreign meat if possible, lard, jam, and in the winter at least—coal. Even water is an item of weekly expense; for where the company's water is laid on to a cottage, there is sixpence or so added to the rent. . . . .

"An oldish man, who had been telling me one evening how they used to live in his boyhood, looked pensively across the valley when he had done, and so stood for a minute or two, as if trying to recover his impressions of that lost time. At last, with appearance of an effort to speak patiently, 'Ah,' he said, 'they tells me times are better now, but I can't see it;' and it was plain enough that he thought our times the worse."<sup>1</sup>



FIG. 35. English Cottages<sup>2</sup>

You can see that the poor people of the day were discontented with the enclosures from the sayings of the time such as

<sup>1</sup> Bourne, George: *Change in the Village*, Duckworth Company, London, 1921; pp. 115-139.

<sup>2</sup> Hissey, James John: *The Charm of the Road*, Macmillan Co., London, 1910; opp. p. 130.



"The law locks up the man or woman  
Who steals the goose from off the common  
But leaves the greater villain loose  
Who steals the common from the goose."

#### AN EXERCISE FOR YOU TO THINK OUT ABOUT "THE ENCLOSURES"

Make a list on the blackboard of the ways in which the enclosure of the common affected this village.

As People Were Torn Loose From the Land They Went  
to the Growing Towns and Cities.

As we saw in the last section, manufacturing and trade were constantly becoming more important. As the people were torn away from the land, they naturally went to the towns where some became traders or shopkeepers, some craftsmen, and as time went on, many more became wage workers in some industry or other.



FIG. 36. The Sea Paths Which English Ships Followed in 1700 as they Carried Goods Back and Forth from England to Other Countries.<sup>1</sup>

BUT NOW LET US TAKE UP THE STORY OF THE WAY  
IN WHICH TRADE AND INDUSTRIES  
WERE DEVELOPING

In the pamphlet on "Resources, Industries and Cities" you learned something of the Industrial Revolution.

<sup>1</sup> Cheyney, Edward P.: *An Introduction to the Industrial and Social History of England*, Macmillan Co., New York, 1920; p. 160.

England, perhaps you remember, was the first country in which this industrial revolution took place.

Can you recall how it came about on this little island? If not, turn back to the pamphlet and review rapidly pages 217-229.

England Developed Rapidly Into a Great Trading Nation,  
and Her Trade Caused Her Industries to Grow

Look at the map of English trades routes in 1700. What do you think of the position of England? Do you think the country is conveniently located to trade with the rest of the world?

In what way must English goods be shipped to the rest of the world?

There is only one possible way—they must be shipped by sea.

Perhaps you think that goods can not be carried so easily by sea as by railroad, for example. If so, you are mistaken. Today, six tons of goods can be carried by ships as easily as one ton can be carried by railroad.

So, even today, although the train is more rapid than the ship, water transportation is better for large quantities of goods than is rail transportation.

And in 1700 there were, of course, no railroads.

So the country which possessed the sea trade of those days was the most important country.

“Whosoever commands the sea, commands the trade of the world; whosoever commands the trade commands the riches of the world, and consequently, the world itself.”

This is what an Englishman, Sir Walter Raleigh, who was a trader and explorer in the 1500s said.

And England's history proved him right.

The little island was so conveniently located for trade by sea with the rest of the world, and her harbors were so good, that rapidly she became a great trading nation and sea power.

Look at the map again. Name the parts of the world with which she traded.

From North America she brought furs, timber, and other raw materials; from Africa, slaves; from India and China, cottons, silks, spices and gems. To the north, south, east and west, even as early as 1700, she sent out her manufactured goods, such as the cloth woven in the homes of the weavers, and implements and weapons made by the smiths.

You can see, then, how trade helped the industries to grow. *If English merchants were to get the timber and spices and cotton from far lands, they must have manufactured goods to trade for these things. So, the craftsmen turned out more and more iron products, woollen materials, and other manufactured goods.*

ENGLAND BECAME SUPREME OVER HER TRADE RIVALS,  
THE DUTCH, SPANISH, AND FRENCH

How rapidly English trade increased during these years you can see from these figures:

The value of goods sent out from	{ in 1600 .....	\$10,000,000
England (that is, the amount "ex-	{ in 1700 .....	34,000,000
ported" was)	{ in 1750 .....	63,000,000

As England's trade grew and as her ships became more numerous on the seas, she came into conflict more and more with other great trading and sea powers, such as the Spanish, the Dutch and the French.

The English traders were determined to go wherever they wished in order to trade, and the English government backed them up with its navy. And many were the struggles between the fleets of the great trading countries. This quotation from a report made by Robert Wenynghton of Devonshire who was commissioned by the English King to clear the sea of robbers, tells of one such battle.

"We met with a fleet of 100 great ships of Pruse, Lubycke, Campe, Rastocke, Holland, Seland, and Flanders, betwixt Guernsey and Portland: and then I came aboard the Admiral and bade them strike (lower their flags) in the King's name of England; which with great insolence they refused to do'; whereupon a hard fought battle followed and 'they yielded all the 100 ships to go with me, in what part that we lust, and my fellows: but they fought with me the day before and shot at us 1,000 guns, and quarell out of number, and have slain many of my fellowship and maimed also. Wherefore me thinketh that they have forfeited both ships and goods at our Sovereign Lord the King's will. . . . and so I brought them, all the 100 ships, within Wight.'" <sup>1</sup>

So the quarrel with other sea powers went on. First there was Spain which had developed a great empire and a tremendous trade. In 1588, the English fleet swept the Spanish fleet, called the Amada, off the seas, and so destroyed her greatest rival for control of the seas. Then the Dutch, a great trading nation, went down before the English and finally the French. So by 1763 England had become the greatest sea power of the world. Her ships carrying goods sailed back and forth between England and the far parts of the world.

She remains to this day the greatest sea power and trading nation of the world.

All this came about chiefly because England was on a little island; a little island of many harbors; a little island no part of which was far from the sea.

<sup>1</sup> Paston Letters, Vol. II, 104, from Ogilvie, Paul Morgan: *International Waterways*, Macmillan, New York, 1920; p. 77.



Lay a scale on a wall-map of England and find out how far the middle of England, at its widest region, is from the sea.

#### EXERCISE

In your notebook write a paragraph telling just why a little island like England would develop into a great trading nation more rapidly than would a great inland country, like Russia, say.

How far is Chicago from the oceans? How far is Kansas? How do these distances compare with the distance of the middle of England from the ocean?

#### AS ENGLAND'S TRADE DEVELOPED HER INDUSTRIES GREW AND THE REVOLUTION TOOK PLACE WHICH CHANGED THE WHOLE INDUSTRIAL SYSTEM

We have learned that from the 1400s on, the industries of England developed rapidly. The woolen industry, particularly, became the great English industry. Later cotton and silk weaving was brought to England by weavers from other parts of Europe. Other industries such as paper making, printing and book binding, soap making, button making, jewelry making, and tool making began to be important in the 1600s.

#### BEFORE 1750 MOST OF THE INDUSTRIES WERE HOME INDUSTRIES

But still most of this work was carried on in the way we have described it—in the homes of the workers.

Spinning and weaving were done by families in their homes, much of it in homes far away from the towns. The crafts which were growing up in the towns were also home crafts. The work was done by the master craftsmen and by apprentices who were learning the trade.

"The great quantities of goods which were every year sent abroad in English ships to the colonies, to Ireland, to the Continent, to Asia and Africa, as well as those used at home, continued to be manufactured in most cases by methods the same as those which had been in existence for centuries. The cotton and woolen goods which were sold in the West Indies and America were still carded, spun, and woven in the scattered cottages of domestic weavers and weaver farmers in the rural districts of the west and north of England, by the hand cards, the spinning wheel, the cumbersome, old-fashioned loom. The pieces of goods were slowly gathered from the hamlets to the towns, from the towns to the seaports, over the poorest of roads, and by the most primitive of conveyances."<sup>1</sup>

<sup>1</sup> Cheyney, Edward P.: *An Introduction to the Industrial and Social History of England*, Macmillan, New York, 1920; p. 177.

## ENGLAND HAD ENORMOUS COAL DEPOSITS

THIS WAS ONE OF THE IMPORTANT REASONS WHY SHE BECAME  
SUCH A GREAT MANUFACTURING NATION

"Coal is by far the most important of all the mineral products. Next to coal in importance is iron. These two are of much greater consequence than all the other mineral products together. The existence of extensive coal and iron fields has profoundly influenced modern civilization. The greatest commercial nations are Germany, England, and America, and each has extensive coal and iron deposits. . . . It has been said that the nations that have coal and iron will rule the world."<sup>1</sup>

Do you think from your study of American industries that this statement is true?

HAVE AN INFORMAL DEBATE, USING THE FOREGOING STATEMENT  
AS THE BASIS

---

AN INDUSTRIAL REGION HAS GROWN UP AROUND  
THE COAL FIELDS OF ENGLAND

Englishmen today speak of one part of England as the Black Country; the rest they call the Green Country. The Black Country, the part of England where coal and iron are found, is today a country of tall smokestacks, overhanging gray smoke, hills blackened by grime and full of the gashes which mines make, a country of houses and factories and mines—this Black Country is the center of England, and one of the great reasons for her importance in the world.

But in the Middle Ages and up to the latter part of the 1700s the Black Country was still green. There were a few coal mines, but the middle of England was largely a country of farms and forests.

Look on the map for the Black Country. It lies between Newcastle (a great coal shipping port) Birmingham, Manchester and Liverpool.

Are the coal fields and iron ore beds of the United States as close together as they are in England?

COAL, ALTHOUGH KNOWN, WAS LITTLE USED  
DURING THE MIDDLE AGES

To be sure, coal was known during those years. We can find the coal fields of Newcastle mentioned as early as 1066. During the 1200s coal

---

<sup>1</sup> Van Hise, C. R.: *The Conservation of the Natural Resources of the United States*, 1910; from Barker J. Ellis, *Economic Statesmanship*, John Murray, Zondo, 1920; p. 13.

was used by the people in the neighborhood of the fields, and some of it was even shipped to London. But still people had little use for the shiny black stuff which we seek so eagerly today.

Charcoal, which is made from wood, was used instead of coal, to smelt iron. Since two loads of wood were necessary to make one load of charcoal and two loads of charcoal to smelt a ton of iron, the forests of England were being rapidly cut down to furnish fuel for the iron works. That was the reason that early in the sixteenth century Parliament, the governing body of England, became fearful lest there should be no timber left to build



FIG. 37. This Map Shows the Location of the Coal Fields of England and The Production of Coal in 1913; Iron is Found in the Same Regions.<sup>1</sup>

ships, and began to limit the cutting of wood for fuel.

Iron was used in those days only for weapons and tools and locks. It was not yet used to build bridges, skyscrapers, ships, trains and machines, as it is today. Nevertheless the iron industry was an old industry, since tools and weapons had been necessary to the English fighters and farmers for a long, long time.

Now when parliament declared that the amount of wood which could be used as fuel was limited, the iron masters were worried.

One of their number, a young man by the name of Dudley, decided early in the sixteen hundreds that coal instead of charcoal could be used for smelting iron.

<sup>1</sup> U. S. Geological Survey, Department of the Interior, 1921.



"His first trials were made in 1619 when he took control of his father's foundry after graduating from Oxford. Wood was scarce and there was plenty of coal. The foundry was located on a coal field, the coal and iron being bedded together so that it had been necessary in the past to produce a certain amount of coal in getting out the iron ore."

Dudley's idea of using this coal to smelt his iron ore was partly successful when he tried it out. However, he had many troubles.

"In the following year floods ruined the works, to the joy of the neighboring iron masters whose works had escaped. Dudley's neighbors claimed that his iron was of inferior grade. . . . The charcoal ironmasters drove him out of Worcester County. He moved to Himley in Staffordshire and made pig iron there, but had no means of converting it into wrought iron and was obliged to sell it to the charcoal iron masters. Another furnace was set up by him at Hascobridge. His bellows were larger and he produced seven tons per week. A riot was finally organized, his apparatus was destroyed, and he was forced to desist."<sup>1</sup>

Such were the troubles of the first man who tried to use coal in making iron.

A century later, however, the experiment was more successful, and coal gradually became the only fuel used in making iron.

Thus coal came into its own—the coal which was later to supply the steam to run trains and ships, the coal which was to run machines, the coal which was to supply the power of the new industrial world. The Industrial Revolution was well started.

#### THE USE OF COAL LED TO ANOTHER IMPORTANT EVENT— THE INVENTION OF THE STEAM ENGINE

As you know, coal is used to make steam, so the steam engine was not likely to be invented until after coal came into general use.

There was another way in which the increased use of coal brought about the use of the steam engine. One of the greatest troubles in coal mines is their flooding with water. Therefore, pumps have to be used to pump the water out of the mines. Now the first steam engines were used to run pumps in coal mines and also in iron mines.

Probably you remember that you have read about the steam engines before. If you cannot answer these questions, go back to the chapter on machines in "Resources, Industries and Cities" and read about the steam engine.

---

<sup>1</sup> Usher, Abbott Payson: *An Introduction to the Industrial History of England*, Houghton Mifflin Company, Boston, 1920; p. 320.

Who invented the first steam engine to be generally used? When? Who improved it? When? What great change did the use of the steam engine make in the way of running machines?

### So, Then, the Use of Coal, Iron, and Steam Grew Up Together

The successful use of coal in the iron industry increased the production of iron.

Coal is used to make steam. The invention of the steam engine grew out of the needs of the coal and iron industry.

The use of steam in the coal and iron industries made them more efficient, and so more coal was mined and more iron made.

AT THE SAME TIME THAT COAL, IRON, AND STEAM WERE  
BECOMING MORE IMPORTANT, INVENTIONS WERE  
BEING MADE WHICH CHANGED ALL THE  
METHODS OF MANUFACTURE

The old tools and machines were very simple. Now came a series of inventions of new and complicated machines which made it possible for one man to do more work at a time, to work much faster, and produce many times as much goods as had ever been done before.

THE MACHINE AGE CAME FIRST IN ENGLAND. THE SPINNING  
AND WEAVING INDUSTRIES WERE THE FIRST TO CHANGE  
FROM HAND POWER TO MACHINE POWER

In the chapter on machines in "Resources, Industries, and Cities" we described these first machines.

If you do not remember the description well enough to answer these questions, go back and re-read it.

When did these inventions take place?

What were some of the most important ones?

Did steam engines have anything to do with these new machines?

The use of machines did not stop, however, with the cloth industries. Other industries, also, were transformed. Men learned to make machines for making locomotives, tools, watches, shoes, and all the other products which we call machine products today. These machines were closely tied up with coal, iron, and steam, since they were made for the most part of iron and later of steel, and came to be run by the power which coal supplied.

## EXERCISE

State in what way each of the following things helped to bring about the Industrial Revolution in England.

1. The geographical position of England.
2. Increased Trade.
3. Coal.
4. Iron.
5. Steam.
6. Machines.

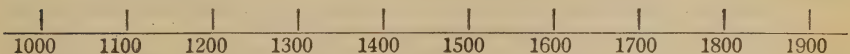
## TEST ON SECTION III

I. (Underscore the correct answer.)

The total area of the principal British colonies (Canada, India, Australia and the African colonies) is about: 2, 10, 20, 30, 40, 50, 75, 100, 200, 500, 1000, times as large as that of the United Kingdom.

II. (Fill in the blanks) Nearly \_\_\_\_\_ of all the people  
(what fraction?)  
of the world live in the British Empire.

III. On the time line mark off the period of time during which the "common" lands were being enclosed in England.



IV. Write a paragraph telling what took place when the "common" lands were enclosed in England.

V. England developed into an important trading nation long before the Industrial Revolution began because: (Check the best reasons)

1. The "enclosures" forced men to go to sea to earn a living.
2. She had better forests than her rivals.
3. Her coal supply was enormous.
4. Her harbors were excellent.
5. She was conveniently located for sea trade.
6. Her people were more warlike than others.
7. Distances to the sea were so short that many people earned their living on it.

VI. England's chief rivals in trade in the 1500s and 1600s were \_\_\_\_\_  
\_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_  
(Fill in the blanks.)

VII. England became an industrial country because: (Check the best answers.)

1. She had great quantities of iron.
2. The enclosures had driven many of her people off the land and into the factories of the cities.
3. Her people were naturally skilled mechanics.
4. Coal existed in great deposits in her soil.



5. She had fine water power.
6. There was such a demand for her manufactures that Englishmen were constantly trying to invent machines.

VIII. Coal was first used on a large scale about: (underscore the best answer) 1200, 1300, 1400, 1500, 1600, 1700, 1800, 1900.

IX. Prove in one sentence that the iron business helped very much to bring about the invention of the steam engine.

BOOKS FROM WHICH PUPILS AND TEACHERS CAN GET  
ADDITIONAL INFORMATION ON ENGLAND BEFORE  
THE INDUSTRIAL REVOLUTION

- Bacon, E. M.:** *The Boy's Hakluyt*; Charles Scribner's Sons, New York, 1910. Accounts of Cabot, Forbisher, Hawkins, Drake, Gilbert and Raleigh.
- The Boy's Froissart.** Charles Scribner's Sons, New York, 1917. The Peasant's Rebellion, pages 274-294. Very good.
- Cheyney, Edward P.:** *An Introduction to the Industrial and Social History of England.* The Macmillan Company, New York, 1901. Peasant's Rebellion, pages 99-132. Enclosures, pages 141-147, and 216-220. Growth of manufactures, pages 183-193.
- Gardiner, S. R.:** *A Student's History of England.* Vol. 1. Longmans, Green and Company, New York, 1904. Peasant revolt, pages 268-269. Inclosures, pages 320.
- Gardiner, S. R.:** *A Student's History of England.* Vol. 2. Longmans, Green and Company, New York, 1904. The fight against the Spanish Armada, pages 458-464. England in the late 1600s, pages 628-633.
- Green, J. R.:** *A Short History of the English People.* American Book Company, New York. For the exceptional readers. Peasant Revolt, pages 244-255.
- Johnson, W. H.:** *The World's Discoverers.* Little, Brown, and Company, Boston, 1900. Accounts of the voyages of Forbisher, John Davis and Drake.
- Osgood, Ellen L.:** *A History of Industry.* Ginn and Company, Boston, 1921, pages 256-317.
- Robinson, J. H.:** *Readings in European History.* Vol. II. Ginn and Company, Boston, 1906. The English go northeast in search of Trade, page 331. How the English got a foothold in India, pages 333-336.
- Tennyson, Alfred:** The Revenge. A ballad which tells the story of a sea fight between the British and the Spanish.

SPECIAL REPORTS WHICH WOULD BE OF INTEREST AT THIS TIME—

1. The Peasant's Revolt in 1381 and some of the leaders: Wat Tyler, John Ball, Jack Straw, John Wrawe, and Ket.
2. The story of Piers the Ploughman—a poem written during this time. Any book on English Literature will give a synopsis of the poem. One of the fullest accounts is in: Pancoast, H. S.: An introduction to English Literature. Henry Holt and Company, New York, 1907, pages 128-130.
3. Great English voyagers who won for England the supremacy of the seas—Hawkins, Drake, Gilbert, Raleigh.
4. The story of Tennyson's "The Revenge."
5. The story of the defeat of the Armada.
6. Accounts of the work of England's leaders who opened up new country and established new markets for English goods. (a) Colonists of America. (b) Robert Clive.

A SELECTED LIST OF BOOKS TO AID THE TEACHER IN THE  
TREATMENT OF SECTIONS III TO VIII INCLUSIVE

We are particularly fortunate to have at hand a number of new books written by trained and experienced students of world politics. For the teacher who can buy, or secure through the city or school library, only a few treatises, we suggest the following:

1. Beard, C. A.: *Cross Currents in Europe Today*. Marshall, Jones and Company, Boston, Mass., 1922.
2. Bowman, Isaiah: *The New World*. World Book Company, New York, 1921.
3. Brunhes, Jean: *Human Geography*. Rand, McNally and Company, Chicago, 1920.
4. Bullard, A.: *The Diplomacy of the Great War*. The MacMillan Company, New York, 1918.
5. Fueter, Edward: *World History, 1815-1920*. (Translated by S. B. Fay;) Harcourt, Brace, and Company, New York City, 1920.
6. Gibbons, H. A.: *An Introduction to World Politics*. The Century Company, New York City, 1922.
7. *New Map of Europe*. The Century Company, New York City, 1914.
8. *New Map of Asia*. The Century Company, New York City, 1919.
9. *New Map of Africa*. The Century Company, New York City, 1918.
10. Gooch, G. P.: *History of Modern Europe, 1878-1919*. Henry Holt and Company, New York, 1923.
11. Keynes, J. M.: *The Economic Consequences of the Peace*. Harcourt, Brace and Howe, New York, 1920.
12. Seymour, Charles: *Diplomatic Background of the War, 1870-1914*. Yale University Press, New Haven, Conn., 1916.

## SECTION IV.

### HOW ENGLAND BECAME THE PIVOT OF WORLD TRADE AND THE CENTER OF A GREAT EMPIRE (*continued*)

#### II. WHAT CHANGES DID THE INDUSTRIAL REVOLUTION MAKE?

##### 1. WORK WAS NO LONGER DONE BY HAND AT HOME BUT BY MACHINE IN THE FACTORY

The new machines were large. They were complicated. They were expensive.

Do you think, then, that the poor weaver in the south or west of England could buy these large, costly machines and set them up in his house?

No, he could not.

He had been barely able to make his living before. Of course he did not have the money to buy a fine new power loom and put it up in his house in place of the old, simple loom.

Who, then, bought the new machines? The men who had made money in one way or another, perhaps in trade, perhaps through owning land or flocks of sheep.

Now if they could make money by owning one machine and hiring a man to run it, they could make more by buying many machines, and hiring many men to run them.

This they did.

These machines were then set up in buildings, and men were hired to work on them.

Thus factories came about.

Factories were not entirely new. Even before the Industrial Revolution wealthy men had hired poor men to spin or weave, or smelt iron for them.

A poem published about 1597 says that

“Within one room being large and long  
There stood two hundred loomes full strong.”

“Each weaver (men were employed) was attended by a ‘pretty boy.’ A hundred women were carding. Two hundred girls were spinning. A hundred and fifty children were picking wool—‘the children of the poore silly men.’ There were fifty shearers, eighty rowers, forty dyers, and twenty hands in the fulling mill.”<sup>1</sup>

---

<sup>1</sup> Meredith, H. O: *Outlines of the Economic History of England*, pp. 153-61: From Marshall, Leon Carrol: *Readings in Industrial Society*, The University of Chicago Press, Chicago; 1918; p. 194.



Although there were occasional factories in those days before the Industrial Revolution, most of the work was done, as we have said, in the homes of the working people.

But they could not buy the new machines. And they could not do nearly as much work on their old hand machines as the hired laborers of the wealthy factory owner could do on the new machines. Therefore they could not sell the goods they made as cheaply as the factory owner could. Nor could they make goods of as even quality as the machines could.

So, gradually, people stopped buying the hand-made goods and bought the cheaper factory goods.

Then the poor men who worked in their homes were poorer than ever. And, of course, they hated the machines, the factory, and the factory owner.

In many places, their poverty and distress and hate led them to smash up the new machines as the following story shows:

#### SMASHING UP THE NEW MACHINES

"Seriously, do you suppose that the putting up of this new machinery will bring you into danger?" inquired Malone. 'Helstone seems to think it will.'

"I only wish the machines—the frames, were safe here, and lodged within the walls of this mill. Once put up, I defy the frame-breakers: let them only pay me a visit, and take the consequences; my mill is my castle.'

"One despises such low scoundrels," observed Malone, in a profound vein of reflection. 'I almost wish a party would call upon you tonight; but the road seemed extremely quiet as I came along: I saw nothing astir.'

"You came by the Red house?"

"Yes.'

"There would be nothing on that road: it is in the direction of Stilbro' the risk lies.'

"And you think there is risk?"

"What these fellows have done to others, they may do to me. There is only this difference: most of the manufacturers seem paralyzed when they are attacked. Sykes, for instance, when his dressing-shop was set on fire and burned to the ground, when the cloth was torn from his tenters and left in shreds in the field, took no steps to discover or punish the miscreants: he gave up as tamely as a rabbit under the jaws of a ferret. Now I, if I know myself, should stand by my trade, my mill, and my machinery. . . .

"The night was still, dark, and stagnant; the water yet rushed on full and fast: its flow almost seemed a flood in the utter silence. Moore's ear, however, caught another sound—very distant, but yet dissimilar—broken

and rugged: in short, a sound of heavy wheels crunching a stony road. He returned to the counting-house and lit a lantern, with which he walked down the mill-yard, and proceeded to open the gates. The big wagons were coming on; the dray-horses' huge hoofs were heard splashing in the mud and water. Moore hailed them.

"'Hey, Joe Scott! Is all right?'"

"Probably Joe Scott was yet at too great a distance to hear the inquiry; he did not answer it.

"'Is all right, I say?'" again asked Moore when the elephant-like leader's nose almost touched his.

"Some one jumped out from the foremost wagon into the road; a voice cried aloud, 'Ay, ay, divil, all's right! We've smashed 'em.'

"And there was a run. The wagons stood still: they were now deserted.

"'Joe Scott!' No Joe Scott answered. 'Murgatroyd! Pighills! Sykes!' No reply. Mr. Moore lifted his lantern, and looked into the vehicles; there was neither man nor machinery: they were empty and abandoned.

"Now Mr. Moore loved his machinery: he had risked the last of his capital on the purchase of these frames and shears which to-night had been expected; speculations most important to his interests depended on the results to be wrought by them: where were they?

"The word 'We've smashed 'em!' rang in his ears. How did the catastrophe affect him? By the light of the lantern he held, were his features visible, relaxing to a singular smile: the smile the man of determined spirit wears when he reaches a juncture in his life where this determined spirit is to feel a demand on its strength: when the strain is to be made, and the faculty must bear or break. Yet he remained silent, and even motionless; for at the instant he neither knew what to say nor what to do. He placed the lantern on the ground, and stood with his arms folded, gazing down and reflecting.

"An impatient trampling of one of the horses made him presently look up; his eye in the moment caught the gleam of something white attached to a part of the harness. Examined by the light of the lantern, this proved to be a folded paper—a billet. It bore no address without; within was the superscription:—"To the Devil of Hollow's-miln."

"We will not copy the rest . . ., which was very peculiar, but translate it into legible English. It ran thus: 'Your hellish machinery is shivered to smash on Stilbro' Moor, and your men are lying bound hand and foot in a ditch by the roadside. Take this as a warning from men that are starving, and have starving wives and children to go home to when they have done this deed. If you get new machines, or if you otherwise go on as you have done, you shall hear from us again. Beware!'"<sup>1</sup>

<sup>1</sup> Bronte, Charlotte: *Shirley*.

## 2. THE MEN WHO HAD WORKED FOR THEMSELVES IN THEIR OWN HOMES BECAME WAGE WORKERS

The machines and the factory and the factory owner were stronger than the hand workers.

As time went on the men who had always worked in their own homes gave up the fight. Instead of working for themselves they worked for someone else. They went to the factories and worked for wages on the machines.

That the workers did not want to make this change, which meant that they lost their freedom and were forced to work as some one else told them to, is shown by this quotation from a man who was reporting on the conditions of the day.

"There is a well known feeling among the farm laborers the brick-layers, and other ordinary artisans in this district, that it is very hard on them to be turned out at early hours every day instead of being able to take what hours they please, like the ribbon weaver, and like him, take saint Monday, and saint Tuesday, too, if they choose. Precisely the counterpart of these feelings is also found in the other sex."<sup>1</sup>

Indeed, it is no wonder that these country people who had lived an independent life did not want to go to the cities, the factories, and the mines.

Wages in factory, mill, and mine were low; prices were high; and men, women, and little children must all work. In the 1840s men in the mills made about \$2.00 a week, unskilled town laborers \$3.00 to \$3.75, skilled laborers, \$4.50, and factory laborers sometimes \$5.00.

"The common people when regularly at work seldom had meat, and even their bread, potatoes, and turnips were of the poorest quality and insufficient in amount. But the worst evil was the irregularity of work. . . . Mills were frequently closed, country work was hard, scarce, and irregular, and even skilled workmen were often without occupation or wages. Actual starvation was only prevented by charity, and a bare and harsh subsistence was the most that could be hoped for even in the best of times. With the increase of population and no public effort to provide space for it, streets and alleys were narrow, houses overcrowded, drainage bad, and the air fetid. In the large manufacturing and commercial cities like Manchester, Birmingham, and Liverpool, thousands of families lived in undrained and unventilated cellars. . . . This poverty-stricken, sordid life was not that of the poorest, most improvident, and most unfortunate of the community, but was characteristic of the great body of substantial, hardworking population, only a fortunate few rising above it. It was the life of the large proportion of the fifteen million people who in 1841 made up the population of England. . . . .

<sup>1</sup> Usher, Abbott Payson: *An Introduction to the Industrial History of England*, Houghton Mifflin Company, Boston, 1920; p. 350.



"The actual working hours in the factories . . . were from twelve and a half to fourteen a day. That is to say, factories usually started work in the morning at 6 o'clock and continued till 12, when a period from a half hour to an hour was allowed for dinner, then the work began again and continued till 7:30 or 8:30 in the evening. . . . Some mills ran even longer hours, opening at 5 A. M. and not closing till 9 P. M. In some exceptional cases the hours were only twelve, from 6 to 12 and from 1 to 7. . . . Few or no holidays were regarded, except Sunday, so that work went on in an unending strain of. . . exhausting labor, prolonged for much of the year far into the night."<sup>1</sup>

The children worked as long hours as their parents did. From the time they were five or six years old they worked twelve, fourteen, sixteen hours—perhaps longer in mine and factory.

The stories of the way these little children were kept awake with a lash to do their work, the stories of their weariness, their hunger, their sickness, and death are such as you would hardly believe. It does not seem possible that men could treat children so harshly. But they did for the sake of making more money. And they fought hard every effort to improve the condition of these working children. This is what Mrs. Browning wrote about these children in her "Cry of the Children."

"Do ye hear the children weeping, O my brothers,  
Ere the sorrow comes with years?  
They are leaning their young heads against their mothers,  
And they cannot stop their tears.

The young lambs are bleating in the meadows;  
The young birds are chirping in the nest;  
The young fawns are playing with the shadows;  
The young flowers are blowing toward the west;

But the young, young children, O my brothers,  
They are weeping bitterly  
They are weeping in the play-time of the others  
In the country of the free.

\* \* \* \* \*

'For oh!' says the children, 'we are weary  
And we can not run or leap:  
If we cared for any meadows, it were merely  
To drop down in them and sleep.'

\* \* \* \* \*

<sup>1</sup> Cheyney, Edward P.: *An Introduction to the Industrial and Social History of England*, Macmillan Co., New York, 1920; pp. 224-338.

They look up with their pale and sunken faces,  
 And their look is dread to see,  
 For they mind you of their angels in high places,  
 With eyes turned on Deity.

'How long,' they say, 'How long, O cruel nation,  
 Will you stand, to move the world, on a child's heart,  
 Stifle down with a nailed heel its palpitation  
 And tread onward to your throne amid the mart?'"

### 3. GOODS WERE PRODUCED ON A LARGER SCALE THAN EVER BEFORE

During these years while factories were growing up, while men, women, and children were leaving their country homes and their looms to live in the cities and work in the factories, the amount of goods which was being produced in mine, mill, and factory was increased greatly.

The new machines never tired, so it was possible to work them long hours. Nor did the employers pay much attention to the fact that the workers grew weary—there were so many other people who wanted their jobs.

And, as we have seen, a machine can produce a vastly greater amount of goods in the same length of time than can a man working by hand.

Furthermore, the number of machines increased tremendously. For example, in 1813 there were 2,300 power looms in use in the British Isles. In 1833 the number had mounted to 100,000.

Therefore, the amount of goods which was produced after the Industrial Revolution increased very rapidly.

#### EXAMPLES OF THE WAY IN WHICH PRODUCTION INCREASED

##### 1. Iron Production

The production of iron in the United Kingdom increased about  $6\frac{1}{2}$  times from 1806 to 1845, as this table shows:

##### Tons of Iron Made in the United Kingdom

1806.....	258,000 tons
1825.....	581,000 tons
1835.....	1,000,000 tons
1840.....	1,500,000 tons
1845.....	1,700,000 tons <sup>1</sup>

<sup>1</sup> Barker, J. Ellis: *The Great Problems of British Statesmanship*, John Murray, London, 1917; p. 231.

By 1913, the year before the war, the iron ore produced had increased to 15,997,000 tons. How many times greater than the production in 1806 is this?

## 2. Coal Production

With increased demand for coal in the iron and other industries, the amount of coal mined in the United Kingdom increased greatly, as these figures show.

<i>Year</i>	<i>Tons</i>
1845 .....	31,500,000
1913 .....	287,430,000

Over nine times as much coal was mined in the United Kingdom in 1913 as in 1845.

## 3. The Textile Industries

The way in which the spinning and weaving industries developed is shown by this table which gives the amount of raw cotton, raw silk, and raw wool brought into the United Kingdom from 1801 to 1845.

All these materials were brought from other parts of the world, from America, India, China, and Australia to feed the looms of the British Isles.

So the increase in the amount of raw material which was brought in is a measure of the increase in the amount of goods made in the mills of the United Kingdom.

### Imported Raw Cotton, Silk, and Wool

<i>Year</i>	<i>Raw Cotton lbs.</i>	<i>Raw Silk lbs.</i>	<i>Raw Wool lbs.</i>
1801	54,203,433	960,000	7,371,774
1805	58,878,163	-----	8,069,793
1815	92,525,951	1,475,389	13,640,375
1825	202,546,869	3,604,058	43,716,966
1835	333,043,464	5,788,458	42,604,656
1845	721,979,953	6,328,159	76,813,865

The amount of cotton which was brought into the United Kingdom increased over thirteen times between 1801 and 1845, the amount of raw silk about seven times and the amount of raw wool over ten times!

Truly the Industrial Revolution with its machines, and factories, and wageworkers brought about a tremendous increase in the *amount* of minerals mined and the *amount* of goods manufactured.

The difference between the amount of goods which could be produced by hand before the Industrial Revolution and the amount which could be produced afterwards is as great as the difference between the old fashioned stage coach and the Twentieth Century Limited.



#### 4. THE POPULATION OF ENGLAND AND OF THE UNITED KINGDOM INCREASED MORE RAPIDLY THAN EVER BEFORE.

The number of people in a country depends, for the most part, upon the amount of food.

As manufactures developed in England, the manufactured goods were shipped to other countries and food was brought back in exchange. Thus, while the working people did not have the right kind or a sufficient amount of food, there was enough food in the country so that more people could live—however poorly.

Therefore, we see the population of the British Isles, particularly England, increasing rapidly. The following table shows the increase of population in England and Wales from 1700 to 1921.

HOW THE POPULATION OF ENGLAND GREW  
FROM 1700 TO 1921

1700.....	5,475,000
1750.....	6,467,000
1800.....	9,168,000
1851.....	17,927,000
1901.....	32,527,000
1921.....	37,885,242 <sup>1</sup>

#### EXERCISE

An interesting exercise would be to make a bar-graph from the statistics of the foregoing table. The graph would show very clearly when population in England began to grow rapidly.

When did the great increase in population begin to take place? Does this fact fit in with our statement that the increase in population came as a result of the Industrial Revolution?

<sup>1</sup> Usher, Abbott Payson: *An Introduction to the Industrial History of England*, Houghton Mifflin, Boston, 1920; p. 270.

# 5. THE POPULATION OF ENGLAND CROWDED TOGETHER IN CITIES IN THE INDUSTRIAL REGIONS WHICH GREW UP AROUND THE COAL MINES

In 1700 most of the people of England lived in hamlets and villages scattered around over the country. There were a few cities, but they were not large.

As industry grew rapidly after 1800, the old towns and cities grew by leaps and bounds, and new towns and cities sprang up.

For example:

Manchester and Salford	grew from 94,876 in 1801 to 311,009 in 1841 <sup>1</sup>
Liverpool	grew from 82,295 in 1801 to 286,487 in 1841
Birmingham	grew from 70,670 in 1801 to 182,922 in 1841
Leeds	grew from 53,162 in 1801 to 152,074 in 1841

Find these cities on your map.

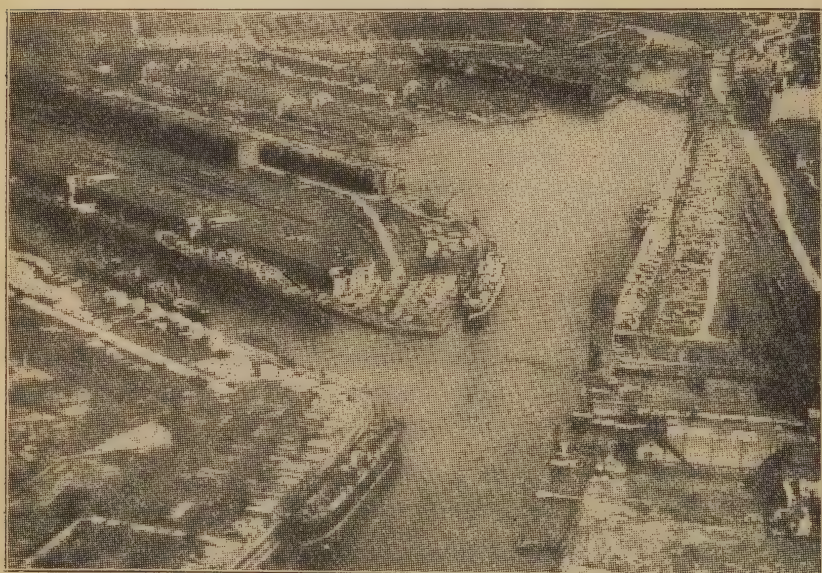


FIG. 39. Sea-Gull View of Manchester <sup>2</sup>

In forty years the population of these towns grew to be three times as large as it was at the beginning of the period.

Manchester, for example, "stands four-square to the most remarkable industrial area upon the face of the earth. Within a radius of but fifty miles

<sup>1</sup> Barker, J. Ellis: *The Great Problems of British Statesmanship*, John Murray, London, 1917; p. 230.

<sup>2</sup> *Our World*: December, 1922, New York; p. 53.

from her Town Hall live nine million people. In no other circumference upon the earth is such a congestion of population. Nowhere else is such a radius of so many smoking factory chimneys, so many miles of railroad tracks, so much and so varied energetic growing industrial enterprise.

"All this has come about within a century and a half. London was already a great metropolitan city when the site of Manchester was pleasant open English fields. Yet change was due. On the evening that James Watt watched the water kettle steaming upon his mother's hearth, the great gods were setting the hour of the transformation of northern England. The industrial era that followed the invention and perfection of the steam engine vastly stimulated the process."<sup>1</sup>



FIG. 40. The Population of the United Kingdom as it is Today<sup>2</sup>

As the nineteenth century went on, England's industries grew stronger and drew still more of the country population to themselves and to the cities.

Thus the cities grew, and a larger and larger proportion of the people lived in them. *Today, four out of five people in England live in cities.* At the same time the number of people working on farms has grown smaller. Fifty years ago there were 2,132,000 people working on the land in England, Wales, and Scotland. Today there are about 1,500,000.

Fig. 40 shows what a tremendous number of people have come together in the towns and cities of the British Isles, in the industrial cities of Glas-

<sup>1</sup> Hungerford, Edward: "How a Canal Made a City," *Our World*, December, 1922, New York; p. 54.

<sup>2</sup> Bruhnes, Jean: *Human Geography*, Rand McNally & Co., Chicago, 1920; p. 402.



gow, Manchester, Liverpool, Newcastle, Leeds, Birmingham, London, particularly. In the black spots there are over 1,300 people to every square mile. These black spots show where the cities of England are.

Now why is it that the cities of England and Scotland are bunched together as they are? Is there any explanation?

Figure 41 will tell you. Study it carefully.

Explain now why the cities and industries of England and Scotland have grown up where they are.

As you read of industrial countries, notice whether industries develop, cities grow, and people congregate where there is coal.



FIG. 41. This Map Shows Where the Coal Fields, the Cities, and the Industries of England are.<sup>1</sup>

The darkest areas are the coal fields. The industries are shown by speckled shading. The letters indicate I, iron; L, lead; C, copper; Z, zinc; T, tin.

#### MAP EXERCISE

##### HOW BRITAIN'S PEOPLE CONCENTRATE NEAR COAL DISTRICTS

1. On an outline map of Europe (or of the British Isles if you can secure one) shade in the coal districts in the British Isles.
2. Indicate by cross-hatching the regions in which the densest manufacturing is done and where more than 75 per cent of the people live in cities.

Is there any relation between the two sets of regions?

<sup>1</sup> Bruhnes, Jean: *Human Geography*, Rand McNally & Co., Chicago, 1920; p. 397.

3. Exchange maps with a neighbor. Correct his map, writing on the margin the name of each district which is incorrectly located. Return your neighbor's map and receive your own.

4. Learn the location of each district that you missed. Try to follow these steps:

First: Compare your work with the correct location on a geography

Second: Close your eyes and try to see in your mind a correct picture map. Note exactly wherein your work is wrong. of each location that you missed.

Third: Study the geography map again to see if the picture in your mind was correct.

Fourth: If it is not, study the map carefully then close your eyes and try this process until you can picture correctly each location that you missed.

Fifth: On a clean map repeat the test, exchanging papers again with your neighbor correcting his test and having him correct yours.

## 6. A GREAT TRANSPORTATION SYSTEM OF ROADS, RAILROADS, AND CANALS GREW UP

### TRAVEL ON THE BRITISH ISLES BEFORE THE INDUSTRIAL REVOLUTION WAS DIFFICULT

We have seen that travel in the early days of our country was difficult. So it was in England.

To be sure, there were roads in England in the Middle Ages. The Roman roads built in ancient times when the Romans conquered England were there connecting the chief towns.

These roads had fallen into decay, however, and we find that travel between the various parts of the British Isles was difficult during the Middle Ages. Trade was therefore small and was carried on with great effort.

"Under the old market system the farmers did their own carrying to market. . . . The custom was to dispatch a train of eight horse-loads at a time under the charge of two men. A load consisted of two three-bushel sacks of oats. The trip required a long day. A like system of horse-pack carriers was used by the Staffordshire potteries to distribute their products and to bring fuel. The Manchester men employed horse-pack trains in their own charge or in that of agents.

"The effect of improvements in transport facilities was . . . to reduce the costs of carriage, make possible larger loads, increase the speed of transit, and add to the safety, comfort and convenience of travel and traffic. . . .

"Carriage by wagon and cart increased as the roads were improved. Wagoners brought wool and cloth to London by regular time schedules in 1706. . . . In 1745 many farmers and others kept teams and carriages for hire to others to bring corn, meal, and malt to London, and carry back coal, groceries, wine, salt, iron, cheese, and other heavy goods for the shop keepers and tradesmen of the country.

"A kind of stage coach was introduced into London in 1608. This hackney-coach soon acquired a 'general and promiscuous use' in the city and



FIG. 42. The System of Roman Roads <sup>1</sup>

spread into the country. By 1685 there had become established a system of stage coach service between London and important places scattered over England, and even Edinburgh. Schedules of time and rates were published. Many private parties took up the occupation of common carrier; they owned stage coaches of their own, had regular places and times of departure and arrival, and sought public patronage by advertising . . . The stage coach . . . became the most common means of travel in the eighteenth century.” <sup>2</sup>

#### EXERCISE

Make a list of the ways in which early travel and trade in England were like early travel and trade in this country.

<sup>1</sup> Our World, June, 1923, New York, p. 95.

<sup>2</sup> Westerfield, R. B.: *Middlemen in English Business*, Transactions of the Connecticut Academy of Arts and Sciences, XIX, 362-691. From Marshall, Leon Carroll, *Readings in Industrial Society*, The University of Chicago Press, Chicago, 1918; pp. 199-200.



As the Industrial Revolution progressed, the amount of goods which was produced made it necessary to carry great quantities of goods from one part of the British Isles to another. Therefore the methods of transportation were improved.

Some improvement had been made in the roads and canals of England during the 1600s and early 1700s. But from 1770 on, the greatest changes were made. By 1800, England had been covered by a fine system of roads. In 1761, the first canal was built from Manchester to Worsley, and within a few years a network of canals had been built throughout the country.

### Railroads Were Built First in England

Do you think this was natural since the great industrial change first took place in England?

Since early in the 1700s short railroads, first with wooden, then with iron tracks, had been built in the coal country in England. On these railroads horses drew the coal cars from the mine to the town, or to the river or canal.

Between 1800 and 1820 several longer railroads of from five to ten miles in length were built. On these, too, horses were used.

In the meantime, the steam engine had come into general use in mine and factory, and several men were experimenting with steam locomotives. A man by the name of Richard Trevithick made the first steam locomotive as early as 1801.

"Several rival locomotives were built by Trevithick. One was run ninety miles over the roads of Plymouth under its own steam. Most of these machines were exhibited at London, and thus gained considerable publicity. The 'Catch me who can,' 1807, was run on a circular track at London, but it was designed as a road locomotive. In February, 1804, Trevithick tried out a train locomotive at the iron works of Pen-y-darrian:

"The engine with water included is about five tons. . . . The steam that is discharged from the engine is turned up the chimney about three feet above the fire, and when the engine works forty strokes per minute not the smallest particle of steam appears out of the top of the chimney . . . The fire burns much better when the steam goes up the chimney than when the engine is idle. Yesterday, we proceeded on our journey with the engine; we carried ten tons of iron, five wagons, and seventy men. It is about nine miles which we performed in four hours and five minutes. We had to cut down some trees and remove some large rocks out of the road. The engine while working went nearly five miles per hour.'"<sup>1</sup>

<sup>1</sup> Usher, Abbott Payson: *An Introduction to the Industrial History of England*, Houghton Mifflin Company, Boston, 1920; p. 435.

But it was not Trevithick who made the real beginning of the English railroad system.

GEORGE STEPHENSON MADE THE FIRST REALLY SUCCESSFUL  
LOCOMOTIVE

An engineer by the name of George Stephenson had built a railroad from Stockton on the mouth of the Tees River on the east coast of England to Darlington in the coal region. This twenty-five mile road was opened in 1825. Horses were used to haul the coal and other freight, and even passengers.

But Stephenson wanted to try locomotives on this line and he persuaded the directors to install six small locomotives which ran at twelve to fourteen miles an hour. They hauled only freight, and horses were still used for hauling passengers and much of the freight.

"The first railroad, however, on which locomotives were regularly used for all trains was the Liverpool and Manchester Railway, opened five years later, in 1830. The trade between these two cities, one the center of the new manufacturing industry, the other the principal port on the west coast, was very large but was entirely dependent on canals and roads. It was therefore much hampered by ice in winter, low water in summer and by the lack of interest and enterprise of the canal and turnpike proprietors. It was said to take longer to carry goods from Manchester to Liverpool than from Liverpool to New York, and Manchester mills were often closed for lack of material when raw cotton was piled high on the Liverpool docks. In 1824 at a public meeting in Liverpool a proposal was made for the building of a railroad, subscriptions were requested, a charter applied for, and Stephenson appointed engineer. . . .

"Much delay was experienced, however, in inducing Parliament to grant a charter. It had been announced that locomotives would be used on the new railway and to these there was much opposition from landowners, proprietors of canals and turnpike companies, and an ignorant public. Magazine articles, pamphlets and speeches in Parliament were devoted to pointing out the evil results that would follow the general use of locomotives. The directors themselves were somewhat doubtful as to the practicability and desirability of the sole use of locomotives for power. There was a widespread belief that on a smooth track the wheels of locomotives would slip, whirling around, and not drawing the engine itself or the cars forward. There was consequently much experimentation in using cog-wheels fitting into a coggled track and with other devices, until some one made a test and found this

difficulty quite imaginary. Still uncertain, the directors held an open competition at Liverpool, in October, 1829. Amid popular interest and excitement the Rocket, a new type of locomotive built by Stephenson, drew twelve tons and a half twenty-nine miles an hour, gained the prize, and was accepted by the directors. The charter having been given by Parliament in the meanwhile, the road, which was thirty miles long over difficult country, was completed and opened September 15, 1830. Six trains a day began to



FIG. 44. The Chief Railroads in 1843 <sup>1</sup>

run on it regularly at an average speed of eighteen miles an hour and at an average passenger fare of about seven cents a mile, though this speed was soon increased and the rate of fare decreased.” <sup>2</sup>

#### TWO QUESTIONS

1. What is there in these descriptions of the early trains to show that the development of the railroads was closely connected with the industrial development of the country?

2. What other industries had to develop before railroads could be a success?

After 1830 the railroads became more important. New lines were constantly being built. In 1836, for example, Parliament authorized twenty-nine new railroads which were to have 1,000 miles of track.

<sup>1</sup> Usher, Abbott Payson: *An Introduction to the Industrial History of England*, Houghton Mifflin Company, Boston; p. 445.

<sup>2</sup> Cheyney: *An Introduction to the Industrial and Social History of England*, Macmillan Company, 1920; p. 210-211.



Where had most of the railroads of England been built in 1843? What were the characteristics of the region in which they were built?

By 1848, 12,000 miles of railway had been authorized by Parliament, and over 5,000 miles opened. More than 25,000,000 passengers rode on these railways in that year.



FIG. 45. The Chief Railroads in 1885<sup>1</sup>

Do you see how the number of railroads and the length of the lines had grown by 1885? These maps do not show all of the railroads of the time—merely the chief ones.

Today, there are almost twenty-four thousand miles of track on the British Isles. This is a very large amount for such a small territory. With 30 times as much territory, the United States has only 11 times as many miles of railroad.

#### CANALS ARE ALSO AN IMPORTANT PART OF THE TRANSPORTATION SYSTEM

Canals have continued to play an important part in the transportation of heavy goods such as coal and iron. There are over 4,500 miles of canals in the United Kingdom. Do you realize how long 4,500 miles are? It is only three thousand miles from coast to coast of the United States! How do you suppose they can double up 4,500 miles of canals to go into those little islands?

<sup>1</sup> Ibid. p. 455.

THE CANAL THAT CONNECTS MANCHESTER  
WITH THE SEA

Manchester was a manufacturing center; particularly for textiles, which grew up with the Industrial Revolution. She was a great city, but she had one disadvantage. She was thirty-five miles from the sea. We have seen that her goods had to be sent by rail to Liverpool, then reshipped to the far parts of the world which used Manchester cloth.

Do you remember that the first important railroad was built between Manchester and Liverpool?

"Manchester began to realize, and bitterly, that no city can ever hope to attain real greatness without abundant water communication. True in the United States, this is doubly so in Great Britain where the commercial

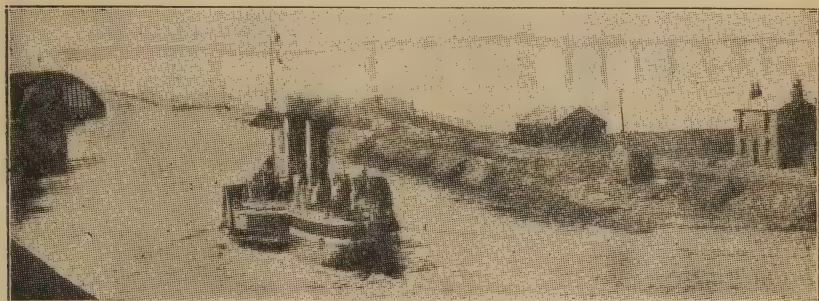


FIG. 46. How Manchester Gets Her Goods to the Open Ocean<sup>1</sup>

strength of the nation is dependent upon the facility with which she may sell and deliver to foreign markets. The answer was London. Was Liverpool. Was Bristol. Was Hull. For when Manchester's first misgivings were recorded, the modern inland British city of the Birmingham and Manchester type was practically unknown. It came as a creation and a consequence of the development of the English railway system. But with that development practically completed there was a lack—a city apparently must have abundant waterways as well as railways to achieve a dominating greatness. . . ."

Manchester business men determined to have a canal through which ocean-going steamers could pass with Manchester goods out into the sea.

"For nearly twelve years construction went steadily ahead. There came a cold January day in 1894 when the thing that had been classed as unbelievable actually came to pass. A great ocean ship came sailing into the heart of Manchester. The town had its own fairway to the sea. . . .

<sup>1</sup> *Our World*, December, 1922, New York; p. 59.

"Slowly but surely the grass disappeared from the idle streets, empty houses echoed once again to the voices of human inhabitants, cold chimneys smoked anew. Commerce quickened. Manchester took to the pathway that was to lead her within two decades to the realization of her dream—the position of the dominating industrial city of the British empire; 794,000

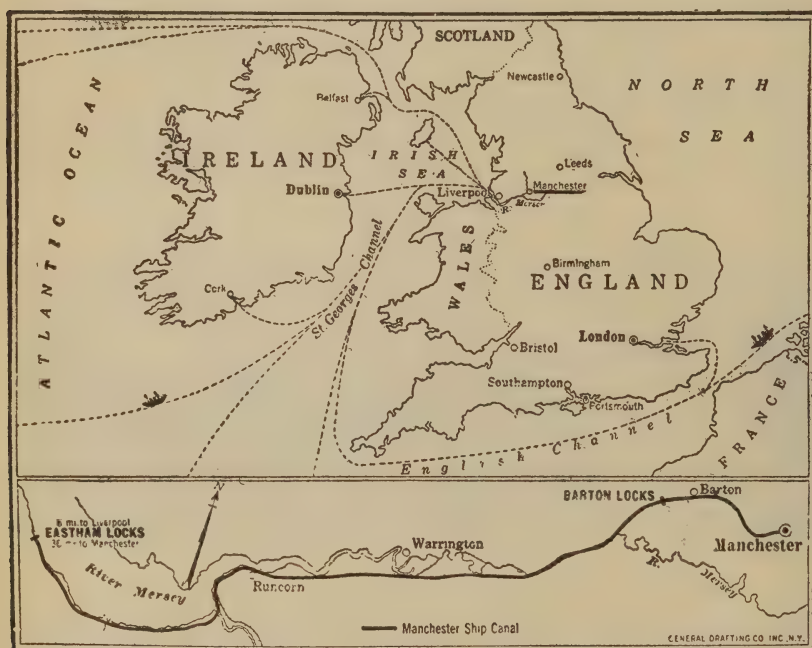


FIG. 47. The Manchester Ship Canal <sup>1</sup>

people within her narrow corporation limits, 250,000 more in Salford, which is so nearly a part of her civic heart that one steps in and out of it without realizing it—eight million more within fifty miles!" <sup>2</sup>

So it was that a great transportation system of roads, railroads, and canals grew up on the British Isles as a result of the industrial development of the country.

Then the roads, railroads, and canals made possible a still greater industrial development. Factories sprang up, mines were opened, mills hummed with life, and cities grew to a tremendous size as a result of this fine transportation system.

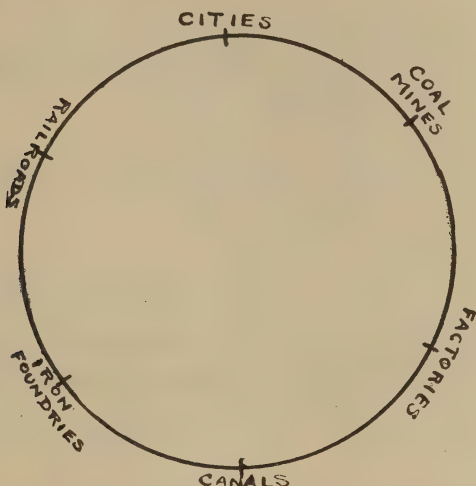
<sup>1</sup> Ibid. p. 55.

<sup>2</sup> Hungerford, Edward: "How a Canal Made a City," *Our World*, December, 1922, New York; pp. 54-57.



## EXERCISE

Draw a large circle and at equal distances from each other around the edges write the words: coal mines, iron foundries, cities, railroads, canals. Like this



Now we want to see whether the coal mines, iron foundries, factories, cities, railroads, and canals which were phases of the Industrial Revolution had much connection with each other.

Draw lines out from each word to the other words with which it should be connected. If you think the development of the coal industry had anything to do with the development of the iron industry or factories, connect them, and so on around.

What kind of a figure do you have when you are through?

Do you think the development of each part of the Industrial Revolution affected every other part?

## TEST ON SECTION IV

I. The Industrial Revolution brought about the following changes:  
(Check the most accurate statements.)

1. Many men set up machines in their homes.
2. More people worked for employers for wages instead of for themselves as formerly.
3. The people of England crowded into cities.
4. Each little village had its factories.
5. More canals were built.
6. The railways of England grew up quite independently of the Industrial Revolution.
7. The invention of machines threw people out of work and sometimes workers destroyed factories and machines.
8. More people worked on the land and fewer in factories.

9. Work which had formerly been done by hand was done by machines.
10. The population of England became more scattered.
11. The working conditions (sanitation, hours, wages, etc.) became very much better in the 1800s than they had been in the 1700s.
12. Home manufacturing gave way to factory manufacturing.
13. England watched enviously the building of railroads in France and Germany, 1800-1825.
14. The amount of coal, iron and textile goods produced increased.
15. The Industrial Revolution had little effect on wages.
16. Railroads were built first in England.
17. Hours of work became much longer between 1800 and 1840.
18. There was a close connection between the invention of the steam engine and the building of railroads.
19. Population grew fast near coal mines.

II. After 1800 the towns of England that were situated near .....  
 ..... grew most rapidly.

The chief reasons for this were:

-----  
 -----  
 -----

III. Write the reasons you can think of to show that the building of railroads was closely connected with the Industrial Revolution.

-----  
 -----  
 -----

IV. Check the kinds of transportation that were very greatly improved in England between 1800 and 1850.

- |                          |                        |
|--------------------------|------------------------|
| 1. Gasoline automobiles. | 6. Airplanes.          |
| 2. Electric railways.    | 7. Travel on highways. |
| 3. Steam railways.       | 8. Street car service. |
| 4. Pack horse trails.    | 9. Stage coaches.      |
| 5. Canals.               |                        |

#### BOOKS FROM WHICH YOU CAN GET ADDITIONAL INFORMATION ON THE CHANGES MADE BY THE INDUSTRIAL REVOLUTION

- Cheyney, Edward P.: *An Introduction to the Industrial and Social History of England*. The MacMillan Company, New York, 1901. The Period of the Industrial Revolution, pages 199-239.
- Knowles, L. C. A.: *The Industrial and Commercial Revolutions in Great Britain During the Nineteenth Century*. E. P. Dutton & Company, New York, 1921. A valuable systematic treatment; contains a bibliography in the appendix.
- Osgood, Ellen L.: *A History of Industry*. Ginn and Company, Boston, 1921, pages 256-317.
- Usher, A. P.: *An Introduction to the Industrial History of England*. Houghton Mifflin Company, Boston, 1920. A systematic account of the industrial development of England.
- Tickner, F. W.: *A Social and Industrial History of England*. Longman's, Green and Company, New York, 1915.

## SECTION V.

### HOW ENGLAND BECAME THE PIVOT OF WORLD TRADE AND THE CENTER OF A GREAT EMPIRE (*continued*)

#### III. TRADE AND SHIPS: HOW ENGLAND SECURED THEM BOTH

Up to this point, we have discussed six great changes that the Industrial Revolution caused within the British Isles.

The effect of the Revolution on the relations of the United Kingdom with the outside World was equally great.

Two great changes came about.

##### 1. ENGLAND'S TRADE AND SHIPPING GREW TREMENDOUSLY

##### 2. ENGLAND DEVELOPED A GREAT WORLD EMPIRE

In this section we shall study how trade and shipping grew. In the next we shall learn how little England became the center of the greatest empire in the world.

"The world has undergone a revolutionary change. . . .

"We trace the limits of a nation as they appear on the map. We think of England, France, Germany, Russia, and Austria-Hungary as confined within eighteenth century borders. This was the Europe of yesterday. It is not the Europe today. States have burst their political confines. They live outside their territorial boundaries. Their economic interests are as wide as the world. . . Nations have become international. Their wealth is scattered all over the world. . . .

"Trade, shipping, and finance have interlocked the world into a world state. . . .

"England has long since ceased to be a European state. Her life is overseas. She is fed by all the world. Four out of five people live in towns and cities. Were the food supply and raw materials of Great Britain interrupted her people would starve. Her mills would close. Her cities would be filled with hungry men and women as they were during the Civil War when cotton from the Confederate States was unable to reach British harbors.



"Britain is the carrier of the world. Her ships link the colonies with the mother country. They, too, would suffer economic collapse if the sea routes were interrupted. Australia, Canada, India, South Africa are so interrelated and so dependent upon an English market that any disaster to the economic life of Great Britain would bring economic disaster to them as well. *For England is the world's market place.* The people of all countries do their buying and selling in the British Isles. Ships load and unload in British ports; her warehouses are filled with commodities from other countries. The foreign commerce of Great Britain amounts to \$5,000,000,000 a year."<sup>1</sup>

Even Before the Industrial Revolution England's  
Trade was Growing Rapidly

AS THE INDUSTRIAL REVOLUTION WENT ON SHE SOLD GOODS  
TO OTHER COUNTRIES AT A TREMENDOUS RATE

After the Industrial Revolution, as people went from the country to the cities, as the output of coal mine, iron foundry, textile mill, and factory increased, trade grew yet greater. The people of England could not buy all the goods which were being produced. Therefore, the goods must be *exported*: that is they must be taken to foreign lands to sell.

The way in which the amount of manufactured goods sent from England to other countries increased is shown by the following table. This table gives the value in pounds (a pound in English money is worth a little less than five dollars) of cotton, woollen, and linen goods exported (sent out to other countries) from the United Kingdom. Think of these amounts multiplied by 5 to see them in American dollars.

Notice how the value increased after 1829.

Yearly average Taken over period of Three Years	Value of Cotton and Woollen Goods	
	Cotton	Woollen
1829-1831	18,077,000	4,967,000
1859-1861	49,000,000	15,041,000
1889-1891	72,114,000	24,176,000
1899-1901	70,340,000	20,898,000
1911-1913	123,167,000	34,194,000
1914-1916	102,548,000	36,545,000
1917-1919	189,000,000	68,800,000
1920-1921 (2 yrs.)	290,200,000	95,050,000 <sup>2</sup>

<sup>1</sup> Howe, Frederick C.: *The Only Possible Peace*, Charles Scribner's Sons, New York, 1919; pp. 1-4.

<sup>2</sup> *The Statesman's Year Book*, Macmillan & Company, London, 1923.

ENGLAND CAME TO DEPEND ON THE OUTSIDE WORLD  
FOR HER FOOD SUPPLY

During the 1800s Englishmen Left Agriculture So Rapidly  
That By 1914 Only 6 Per Cent of the People  
Worked on the Land

At the same time British industries and the amount of manufactured goods and raw materials exported were increasing so rapidly that British agriculture was declining.

Until 1872 the amount of land which was plowed and planted with crops increased slightly year by year. In that year the number of acres plowed and sown in Great Britain (England, Scotland and Wales) was 13,839,000. From that time on fewer people farmed and less land was cultivated. By 1914, only 10,306,000 acres were under cultivation—a decline of 26 per cent from 1872.

*In forty years, the land sown in wheat in the United Kingdom decreased by fifty-four per cent!* Consider this: the average number of acres planted each year, 1867-1870, was 3,837,000. In 1911 only 1,700,000 acres were planted.

In the same way the number of acres given to oats, barley, and potatoes decreased.

By 1914 only 6% of the population of Great Britain worked on the land.

And yet the population of the United Kingdom was  
increasing at an alarming rate

We can see from these facts that the food which the hungry millions in the cities demanded could not be procured from the farms of the British Isles. *It had, therefore, to be brought in from other parts of the world.* That meant that England would *import* food.

This table shows the increase in the number of pounds of wheat *per person* brought in to the United Kingdom from 1861-1913. The average number of pounds of wheat used each year by each person in the United Kingdom is about 360 pounds. This table, then, shows what a large proportion of the wheat used in England came to be imported.

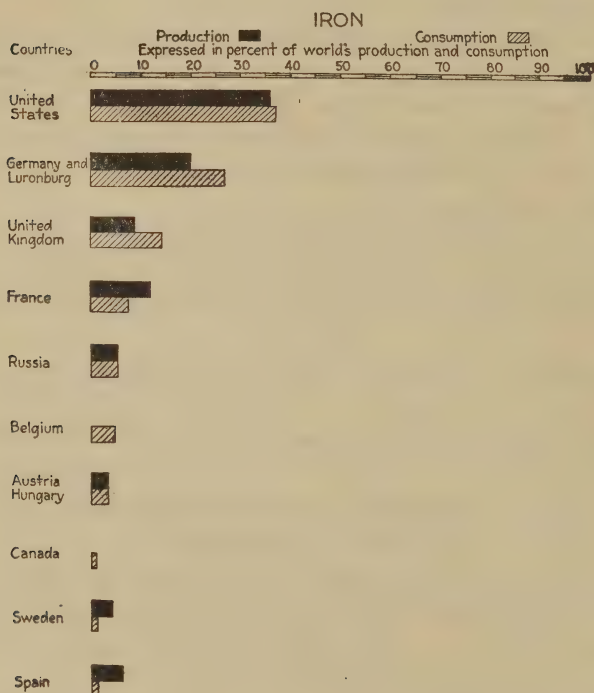
How large a proportion is it?

YEARS	Pounds Average Annual	YEARS	Pounds Average Annual
1861-1865	135	1891-1895	281
1866-1870	138	1896-1900	266
1871-1875	178	1901-1905	296
1876-1880	213	1906-1910	289
1881-1885	244	1911-1913	294 <sup>1</sup>
1886-1890	263		

<sup>1</sup> Hibbard Benjamin H.: *Carnegie Endowment for International Peace*, Oxford University Press, New York, 1919; p. 169.

In the same way the importation of meat, eggs, and other dairy products increased in startling fashion. Even before the World War was over 40 per cent of the meat eaten in England came from outside the British Isles.

**INDEED, ENGLAND CAME TO DEPEND ON THE OUTSIDE WORLD FOR OVER HALF HER FOOD SUPPLY**



**FIG. 48.** Amount of Iron Produced and Used by Leading Countries Industrial Countries in 1913.

**ENGLAND DEPENDED ON THE OUTSIDE WORLD FOR RAW MATERIAL, ALSO: IRON ORE, COTTON, RUBBER, TIMBER, WOOL**

1. Iron is Essential in an Industrial Country. Does England Produce Herself all of the Iron That She Uses?

England has a certain amount of this most important metal. But it takes tremendous quantities of iron to build the railroads, bridges, skyscrapers, and machines of an industrial civilization.

Study the bar graph of Fig. 51 to see if England produces enough to satisfy her own needs.



If the solid bar of Fig 48 is longer than the cross lined bar, what is shown about that country?

If the cross lined bar is longer than the solid bar, what is shown?

What does the bargraph tell? Must England and the rest of the United Kingdom import iron?

## 2. A Country That Manufactures Cotton Goods Must Have Supplies of Raw Cotton

### Does England Produce Cotton Herself?



FIG. 49. The First Circle Shows Where Cotton is Grown; the Second Shows Where it is Made Into Cloth

You can find the answer to the question in Fig. 49.

Is any cotton raised in the United Kingdom? What proportion of the world's cotton is made into cloth in the United Kingdom? What countries produce more cotton than they can make into cloth? From what countries, then, does the United Kingdom probably get her cotton?

As a matter of fact, although both India and Egypt, colonies within the British Empire, raise cotton, most of the cotton used in the United Kingdom comes from the United States.

### AN EXAMPLE OF ENGLAND'S DEPENDENCE ON OTHER COUNTRIES

When the supply of cotton from the United States is interrupted, there is trouble in England as the following clipping from a New York paper for December 4, 1923, shows:

## Cotton Shortage Here Hurts British Mills

### Boll Weevil Ravages in America Cause Unemployment for Lack of Raw Material

WASHINGTON, December 4.—A crisis in the English cotton industry has been brought about by the ravages of the boll weevil in the cotton fields of the United States, combined with the European situation and conditions in the world generally, according to the Department of Agriculture. Reports to the department forecast hard times in the English cotton centres this winter.

Thousands of men and women in Lancashire are working half time, these reports state, and some mills are running at a loss to retain their skilled employees pending a return of good times. One trade union secretary estimates 40,000 operatives have left the industry for good. India and China, Lancashire's largest customers for piece goods, can now buy only a fraction of the quantity they purchased before the war.

#### ENGLAND IS A TRADING CENTER

Thus we have seen that England is a great trading center. Vast quantities of goods go out from her ports and come into her ports every year.

#### ENGLAND GATHERS TOGETHER THE TRADE ROUTES OF THE WORLD

Does the map of Fig. 50 portray the way she does it? Do you see the hand and fingers of trade encircling the little island of England? And the arms reaching back and out trailing off over the sea paths of the whole world?

How clearly the map shows how England has become the center of trade!

Which two countries do the most trading?

The East and West route across the Atlantic is the most important. Which is the next most important?

Could you defend, now, the statement that the Mediterranean Sea is very important to trading nations?

Notice how a heavy band of trade moves from England down around the coast of Spain, through the Mediterranean Sea, branching off into important harbors as it proceeds, through the Suez Canal and the Red Sea around the southern coast of Asia. This line branches off to the east coast

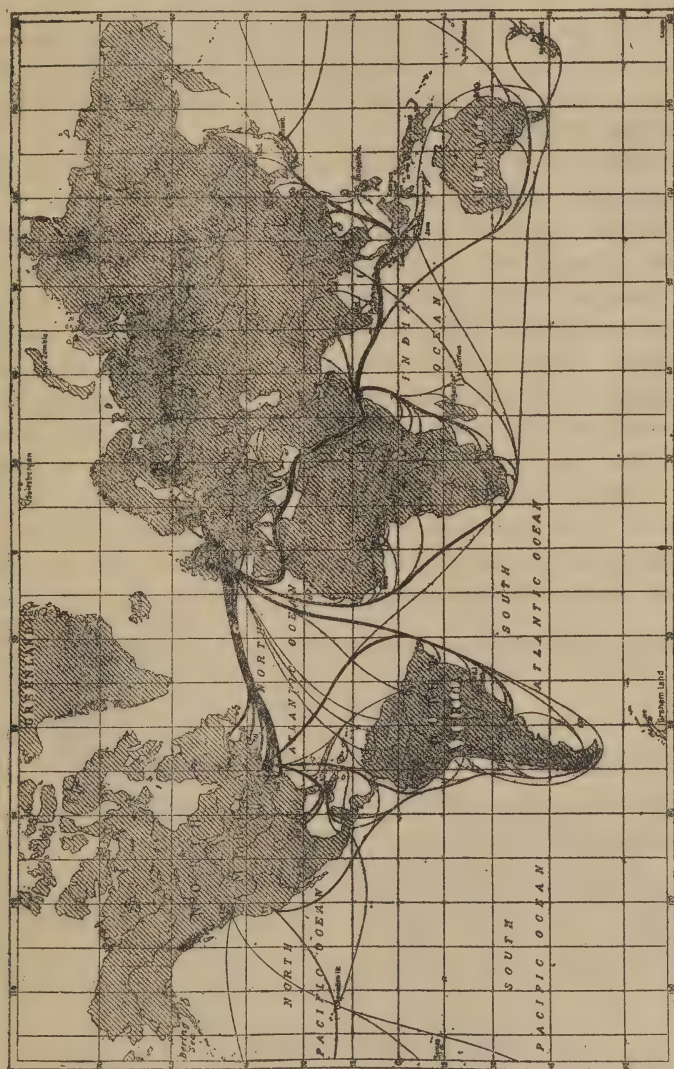


Fig 50. The Trade Routes of the World. The Width of the Black Bands Tell How Heavy the Trade Is. Where are the Bands Widest? Where do They Thin Out? What are the Four Most Important Trade Routes?

of Africa, to India, to Australia, to China, to Japan, and to many other points. (As we go on you will see how England has tried to keep this important Mediterranean route for her shippers.)

<sup>1</sup> Bowman, Isaiah: *The New World*; World Book Company, Yonkers, New York; 1921.



Do you see how England collects and gathers together the threads of the world shipping and brings them into her ports.

WITH WHAT OTHER COUNTRIES DOES THE UNITED KINGDOM  
CARRY ON MOST OF ITS TRADE?

1. To whom did she sell her goods?

The United Kingdom traded before the war both with her own colonies (Look back at the map of the British Empire, Fig. 33) and with other countries, particularly with the other great industrial nations—Germany, France, and the United States.

The colonies bought heavily of the manufactured goods of the United Kingdom, but the industrial countries were even better customers.

"In 1911, for example, Great Britain sold to Germany fifty-seven millions pounds (a pound was worth about five dollars) worth of goods. This was more than the value of her exports to her immense Indian empire. . . In the same year England sold to Russia goods to the value of twenty-two million pounds. That was more than she sold to all the dusky natives of her African and her distant insular possessions. In 1913, England's business with Germany, counting exports and imports, was equal to more than one-third her entire business with all her colonies, dominions, and dependencies. . . . There is another fact worth remembering, namely, that Great Britain, in 1913, did five hundred million pounds' worth of business with her imperial possessions and a billion pounds of business with the lands she did not rule, namely, the free nations of the world."<sup>1</sup>

What parts of the world were England's best customers?

---

2. From whom did she buy food and raw materials?

We have seen that most of the cotton which is used in the United Kingdom comes from the United States.

In the same way, over half the wheat used in bread stuffs in the United Kingdom comes from foreign countries rather than from the colonies which make up the British Empire.

Do the following figures show this fact?

The United Kingdom imported in 1919

3200	million pounds of wheat from the United States
1500	" " " " " Australia
700	" " " " " Argentina
1700	" " " " " Canada

---

<sup>1</sup> Beard, Charles A.: *Cross Currents in Europe Today*, Macmillan-Jones Company, Boston, 1922; p. 85.

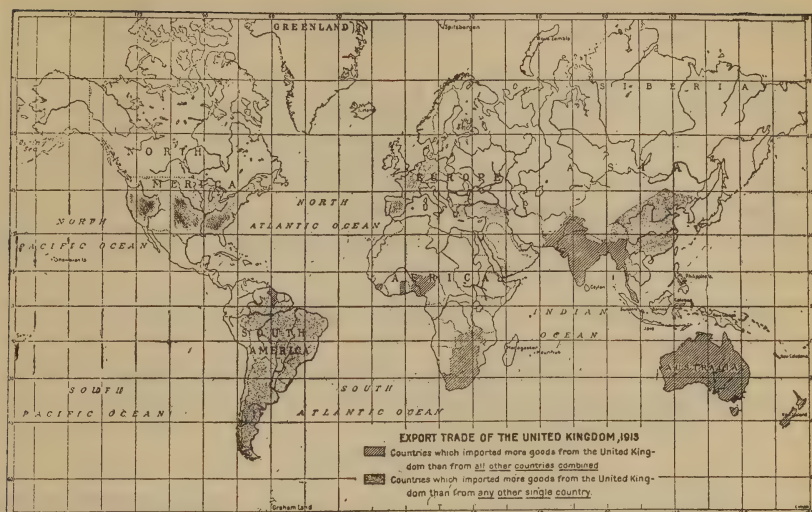


Fig. 51. The Countries to Which the United Kingdom Sent Great Quantities of Goods<sup>1</sup>



Fig. 52. The Countries From Which the United Kingdom Receives Great Quantities of Goods<sup>1</sup>

<sup>1</sup> Bowman, Isaiah: *The New World*; World Book Company, Yonkers, New York; 1921.

AN EXERCISE TO HELP YOU TO LEARN THE COUNTRIES ENGLAND  
IS DEPENDENT UPON FOR FOOD AND SUPPLIES

Make four blackboard list of

*First:* The countries which in 1913 imported more goods from the United Kingdom than from all other countries combined;

*Second:* The countries which imported more goods from the United Kingdom than from any other single country;

*Third:* The countries which exported more goods to the United Kingdom than to all other countries combined;

*Fourth:* The countries which exported more goods to the United Kingdom than to any other country.

Check the countries on this list which are a part of the British Empire.

Write out the most important conclusions you can draw from this study.

England has become the greatest trading nation of the earth. She traded not only with her colonies, but also with many other lands, particularly the industrial countries.

How is it she has become so great a trading center?

There are four important reasons

I. SHE WAS, AS WE HAVE SEEN, IN A FAVORABLE  
LOCATION TO CARRY ON SEA TRADE WITH  
THE REST OF THE WORLD

II. SHE WAS THE FIRST COUNTRY TO GO IN FOR  
MACHINE MANUFACTURING ON A LARGE  
SCALE. SHE WAS THE FIRST TO  
BECOME "INDUSTRIALIZED"

We have found out that industrial countries like England, Germany, France and the United States, trade more than non-industrial countries like China, Brazil, Russia, Poland. Since England became an industrial country earlier than the others she had the chance to build up a great trade before any of the other countries got a good start. Therefore, the trade routes of the modern industrial world naturally centered in England.

III. SHIPS! SHIPS! SHIPS! A GREAT BRITISH  
SHIPPING INDUSTRY WAS BUILT UP

The third important reason is that Englishmen have built up a great shipping industry. Since England imported and exported so much goods,



certain Englishmen found it profitable to build ships and carry this goods back and forth. Thus England did not have to depend on French, German, or American ships to carry her goods.

As factories multiplied, as more coal was mined, more steel was made and more railroads constructed, there was a demand for ships and more ships. Ships to carry the products of mine and factory away from the United Kingdom. Ships to transport food and raw materials to the hungry millions of England's factories.

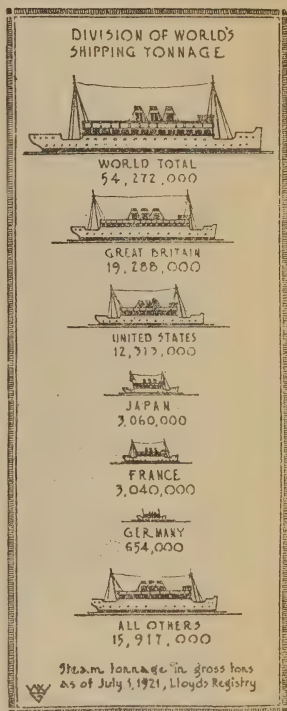
In 1848, for example, the number of tons a year which British ships carried was 100,000. In 1878, it was 400,000—an increase of 300 per cent in 30 years!

England became the greatest shipping country in the world.

How well Fig. 53 shows what happened!

In 1921 the ships of the world could carry 54 million tons (a ton is 2,000 pounds) of goods. Of this amount 19 million tons—over one-third—was carried in British ships! The United States came second with 12 million. Are you astonished to learn that little Japan was third?

Naturally, then, with British ships carrying so much of the world's trade, England became a center for shipping and reshipping goods.



(From The Magazine of Wall Street)

FIG. 53<sup>1</sup>

#### IV. THE FOURTH REASON FOR ENGLAND'S LEADERSHIP IN TRADE: SHE HAD TREMENDOUS STORES OF COAL

Here we meet coal again! We have seen at many points how necessary it is to the building up of a great industrial nation.

How was it that England's coal helped her build up her foreign trade.

In what country does the sea-borne coal routes center? In what ways are these routes the same as the world trade routes and in what ways different?

Do the countries to which England sends coal seem to be those to which she sends her manufactured products and from which she draws food and raw materials?

<sup>1</sup> Reprinted from the *Industrial Digest*, February 11, 1922.



## MAP EXERCISE

## MAKE A MAP OF THE SEA-BORNE COAL TRADE OF THE WORLD

1. On an outline map of the world show by black lines the principal routes by which the coal of the world is distributed.
2. Exchange maps with a neighbor. Correct his map, writing on the margin the name of each route which is incorrectly located. Return your neighbor's map and receive your own.
3. Learn the location of each route that you missed. Try to follow these steps:

First: Compare your work with the correct location on a geography map. Note exactly wherein your work is wrong.

Second: Close your eyes and try to see in your mind a correct picture of each location that you missed.

Third: Study the geography map again to see if the picture in your mind was correct.

Fourth: If not, study the map carefully then close your eyes and try this process until you can picture correctly each location that you missed.

Fifth: On a clean map repeat the test, exchanging papers again with your neighbor correcting his test and having him correct yours.

This is the way British coal is carried to other parts of the world. You see the goods which are brought to England—such goods as timber, iron, oil, wheat, cotton, are all goods which take up a great deal of space in the ships. On the other hand, the manufactured goods which go out from England, such as cutlery, cloth, and so on, take up a very small amount of space.

Now, the ship owners like to have their ships full of goods all the time. And if it were not for coal the ships which carry on trade with the ports of England would leave those ports much lighter than they came.

But as it is, coal is carried away with the manufactured goods to far parts of the world.

Thus, coal has caused shippers to come to British ports and England has built up a great trade. Other countries which have not worked out this scheme are at a disadvantage in trading.

Here is an account of ocean trade which shows this scheme of shipping out manufactured goods and coal in exchange for raw materials and food.

In order to understand the account, you must know that there are two kinds of ships which carry goods on the ocean. One is the tramp ship



which goes wherever there are large amounts of goods to be shipped. It has no regular route and no regular time. It carries, usually, one kind of goods at a time—something which is being shipped in large quantities.

The other kind of ship is the line vessel, "a liner" we call it, which travels back and forth between the same points at regular periods. These ships carry smaller quantities of many kinds of goods.

" . . . There were in times of peace thousands of vessels operating independently, commonly called tramps. These ships were for hire to anybody who could send a shipload at one time. . . . The necessity of shipping at least 2,000 to 8,000 tons reserves the tramp to special shippers and special commodities. Who ever heard of a ship load of cotton cloth, or of hats, or shoes, or autos, or locomotives or freight cars, of cutlery, books, playing cards, and musical instruments, of cigarettes, ready-made clothing or ostrich feathers, of lard, bacon, butter, biscuits, canned salmon, or copper? These are typical commodities of that very long list of things that must go in small quantities, and therefore cannot make use of tramp service but need the regular dependence of the line of vessels sailing on schedule and combining in their cargo a hundred or a thousand or five thousand small shipments of assorted materials. Shippers can avail themselves of the . . . tramps only with goods of great quantity, usually raw materials of low value. At some times of the year you may find on almost every sea ships loaded with coal, iron ore, nitrate of soda, wheat, corn, sugar, lumber. Many of these tramp commodities are seasonal goods, handled in great quantity after harvest in a busy trade that falls away to nothingness a few months later. Thus the Argentine needs one hundred tramp ships per month in November, December, and January to take her maize (corn) to Europe. During these months she imports a large part of her millions of tons of coal which comes almost exclusively from Wales. . . . The goal of the tramp steamer is to keep his vessel always loaded, a fact which the nature of trade always denies to some of them.

"Therefore the most skilfull manager keeps his vessel loaded as nearly as possible, all the time. He can not consider a single voyage alone. He must consider the next and the next. He prefers to sail from Wales to Buenos Aires rather than to Cape Town because Cape Town lacks the heavy cargo for return voyages, so that the coal ship from Cape Town must often go in search of cargo across the Indian Ocean to India, or the Atlantic Ocean to South America before her captain can hear the welcome sound of freight going into the hold. If outbound to Australia, she may at some seasons carry coal thence across the wide Pacific to Chile, and load there with nitrate of soda for the North Atlantic. In this ocean her owners would much prefer to discharge at Savannah, Georgia, than at London, for Savannah has cotton and lumber to ship to Europe, whereas hungry London

has nothing for the tramp, which must go out in ballast, while the liner takes the London export of fine manufactures.

"Rather than fruitless ballast, any owner would choose to take coal at less than cost, and so it happens that the world's coal is distributed as a kind of by-product of the tramp steamer traffic, and Britain is its chief source of supply, not because of superior quality or quantity of her coal, for in both of these respects she is inferior to the United States, but *because Britain is a tremendous importer of food and raw materials*, and, as her export of manufactures is much lighter than the raw imports plus the food, she has five or six million tons a month of empty outgoing ships whose owners are glad to carry coal at a nominal price. Since the United States is an exporter of raw material, a coal vessel leaving our shores would have to come back in ballast, and therefore our export coal freights are much smaller than British freights. . . Our export in 1913 was 22,000,000 tons, while that of England was 77,000,000 tons. Yet our coal production was several times larger than that of the British Isles."<sup>1</sup>

From reading that account you should be able to answer a very important question.

JUST WHY IS IT THAT ENGLAND IS THE WORLD'S  
GREATEST SHIPPER OF COAL?

---

THERE IS ONE OTHER QUESTION WE SHOULD STUDY ABOUT  
COAL: WHAT NATIONS PRODUCE IT AND USE IT?

You can answer the question from Fig. 55.

What does the solid bar show? What the cross-lined bar?

If the solid bar is longer than the cross-lined bar, what is shown by that fact?

If the cross-lined bar is longer than the solid bar, what is shown by that fact?

What are the chief coal producing countries? What about great Britain?

Great Britain mined 22 per cent of the world's coal before the war. She consumed 15 per cent. This means that she had 7 per cent left to ship to other countries. Seven per cent may seem small to you, but do not forget that it meant millions of tons of coal. It meant hundreds of coal ships loading up in English ports. That 7 per cent explains much of England's leadership in trade.

---

<sup>1</sup> Smith, J. Russell: *Influence of the Great War Upon Shipping*, Carnegie Endowment for International Peace, Oxford University Press, New York, 1919; p. 5-7.

Does the bar-graph show that the United States produced more coal than Great Britain? Is it true that Great Britain exports more than the United States?

Coal, then, helped England to build up a great trade and England's great trade helped her to export her coal.

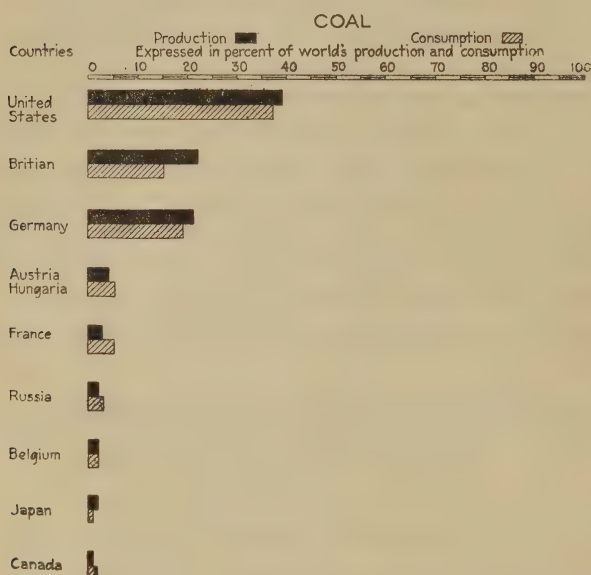


FIG. 55. The Production and Consumption of Coal by the Leading Countries

#### EXERCISE

Make a list of the ways in which coal is important to an industrial nation.

#### ENGLAND, THEN, BECAME THE CENTER OF WORLD TRADE

So it was that England became the world center of trade and shipping. This position she held—almost undisputed—for about a hundred years.

So complete was England's control of world trade, so much was she the center of all shipping, that many products were shipped from some other country to England, and then *reshipped* to some other part of the world instead of being shipped straight from the country exporting them to the country importing them. How tremendous the trade of the United Kingdom is can be seen from the following figures for 1913, the last full year before the war.



## Imports and Exports of the United Kingdom in 1913

	£
Total imports, value in pounds.....	768,734,739
Exports of British produce, value in pounds.....	525,253,595
Exports of goods from other countries, value in pounds.....	109,566,731
Total exports .....	634,820,326
Counting the pound as worth \$5.00 change these figures into dollars.	

How Germany began to climb up and threaten England's position as a center of world trade in the years before the war we shall see in this pamphlet.

And in a later pamphlet we shall see how this threat to England's trade supremacy helped very greatly in bringing on the War.

## EXERCISE

Write a description of what would happen on the British Isles if they were cut off from the rest of the world.

## TEST ON SECTION V

I. On a blank sheet of paper make three lists under the following titles:

Products (raw materials and manufactured goods) England can produce in sufficient quantities at home.	Products which England is forced to buy from other countries.	Products which England sells in large quantities to other countries.

II. For foodstuffs England depends principally upon:

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_,  
(Fill as many blanks as you need to, naming the countries or regions.)

III. For raw cotton England depends principally upon \_\_\_\_\_,

\_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

(Name the countries or regions. Fill as many blanks as you need to.)

IV. For coal England depends principally upon \_\_\_\_\_,

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

V. For iron England depends principally upon \_\_\_\_\_,

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

VI. For steel rails, locomotives, machinery, etc: England depends principally upon \_\_\_\_\_,

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.

VII. England owns:  $\frac{1}{10}$ ,  $\frac{1}{3}$ ,  $\frac{1}{2}$ ,  $\frac{2}{3}$ ,  $\frac{9}{10}$  of all the shipping of the world. (Underscore the correct answer.)

VIII. Check the correct statements:

- (a) The Industrial Revolution forced England to depend on other countries for food.
- (b) England has always been quite independent of other parts of the world.
- (c) ——— After 1800, Englishmen turned to farming in great numbers.

IX. Check the best reasons for the answer you have given in No. VIII.

- 1. England has a very fertile soil.
- 2. Her coal mines are very valuable.
- 3. Most of her people work in factories.
- 4. For hundreds of years Englishmen were known as good farmers.
- 5. People crowded into cities.
- 6. The English were famous for their fine foods.
- 7. Population grew much faster than ever before.
- 8. England's population concentrated in manufacturing districts.

X. Write four reasons why England became the greatest trading nation in the world.

-----  
 -----  
 -----  
 -----

#### MAP TEST

XI. On a blank world map, draw black bands to show the principal routes followed by ocean-borne freight. By the width of the bands show roughly where the greatest amounts of freight are carried.

#### BOOKS FROM WHICH YOU CAN GET ADDITIONAL INFORMATION

- Allen, Nellie B.: *Europe*. Ginn and Company, Boston, 1913, pages 72-98.  
 Allen, Nellie B.: *The New Europe*. Ginn and Company, Boston, 1913, pages 76-102.  
 Carpenter, Frank G.: *Europe*. American Book Company, New York, 1912, pages 55-75.  
 Day, C.: *History of Commerce*. Longman's, Green, and Company, New York.  
 Osgood, Ellen L.: *A History of Industry*. Ginn and Company, Boston, 1921.  
 Smith, J. Russell: *Commerce and Industry*. Henry Holt and Company, 1916, pages 531-536, 357-359, 252-255.  
 Smith, J. Russell: *Industrial and Commercial Geography*. Henry Holt and Company, New York, 1913, pages 572-575 and 374-375.  
 Tickner, F. W.: *A Social and Industrial History of England*. Longman's, Green and Company, New York, 1915.

## SECTION VI.

### HOW ENGLAND BECAME THE PIVOT OF WORLD TRADE AND THE CENTER OF A GREAT EMPIRE (*continued*)

#### (IV.) THE ISLAND KINGDOM BECOMES MASTER OF ONE FOURTH OF THE WORLD

Do you remember the story of the travelling salesmen who argued whether England could live by herself?

The chief point that the Englishman of the company, made was that England didn't have to depend on other countries. She could get her wheat and cotton and other products from parts of her own Empire, he said. England didn't have to trade with France, Germany, the United States and other foreign countries. Canada, India, Australia, Egypt, and South Africa belonged to England; this far-flung Empire would supply her with all she needed.

To find out whether the Englishman was right you have studied how England grew to be a great industrial power. You have also learned how her ships went to all parts of the earth.

Now we need to study more carefully how she got land and riches in distant parts of the earth.

First let us turn back to the picture of the world's greatest empire—an empire that encircles the earth.

The map of Fig. 33 portrays it.

#### BLACKBOARD EXERCISES FOR YOUR CLASS

Make a list which will show (1) the lands that belonged to the British Empire in 1800; (2) lands added between 1800 and 1914 and (3) lands secured since 1914.

In which period were most of the lands of the Empire added?

---

#### MAP EXERCISE

#### HOW THE UNITED KINGDOM EXPANDED INTO THE BRITISH EMPIRE

1. On an outline map of the world, color in (any color) the possessions of the United Kingdom before 1800.



2. On the same map color in (using another color) the territory that the United Kingdom acquired before 1914.
3. On the same map, color in (using a third color) the territories that the United Kingdom secured as a result of the World War, i. e., since 1914.
4. Exchange maps with a neighbor. Correct his map, writing on the left margin the name of each region which is incorrectly located. Return your neighbor's map and receive your own.
5. Learn the location of each region that you missed. Try to follow these steps:

First: Compare your work with the correct location on a geography map. Note exactly wherein your work is wrong.

Second: Close your eyes and try to see in your mind's eye a correct picture of each location that you missed.

Third: Study the geography map again to see if the picture in your mind was correct.

Fourth: If not, study the map carefully then close your eyes and try this process until you can picture correctly each location that you missed.

Fifth: On a clean map repeat the test, exchanging papers again with your neighbor correcting his test and having him correct yours.

---

### WAS THE INDUSTRIAL REVOLUTION A CAUSE OF THE GROWTH OF THE BRITISH EMPIRE?

Does the map you have just made give any evidence from which you can answer that question?

What evidence?

Be ready to tell the class how the map shows a relation between the Industrial Revolution and the growth of England's empire.

## Here Is More Evidence About the Matter

HOW THE TERRITORY IN THE BRITISH EMPIRE GREW

	Square Miles	Per cent of whole world's area
1800	1,500,00	2
1850	4,500,000	8
1900	11,300,000	20
1919	13,700,000	25

When did the British Empire begin to grow very large? When did the Industrial Revolution occur? What do you think now: Was the Industrial Revolution a cause of the great growth of England into an empire?

Another Way of Studying the Question: Was the Growth  
of British Trade Related to the Securing of More  
Territory in Foreign Lands

The Industrial Revolution undoubtedly increased trading very much. England's trade with various parts of the earth increased tremendously after 1800, as we have learned in the last section.

WHAT THE RELATION IS BETWEEN BRITISH TRADE  
AND BRITISH COLONIES

The connection between British trade and the British colonies (the lands of the Empire outside the British Isles) is very important for most of these colonies were added to the British Empire as industries grew and trade developed.

This is the way it happened—not only in England but in France, Germany, and in other industrial countries.

You see, the people who had capital—that is, the owners of mines and factories, were making great sums of money at home. Now, they could not use all this money themselves so they looked for places to put it (to invest it) so that it would bring them more money.

Some of them built new factories in England, installed new machines, and hired workmen.

But there were already many factories in England, and *the people of the British Isles did not have money enough to buy all the goods made in English factories.* So the factory owner had to look for other places to sell his goods. He took them to Canada, to India, to China, to many parts of the world in order to sell them. That is, *he searched for a market for his goods,* outside his own country.

Many other men who made money also decided to build factories, or to mine coal, or to dig oil wells, in the far parts of the world where coal or oil were to be found, and where the industrial revolution had not yet taken place. This was considered a very good scheme, and the oil wells, coal mines, rubber plantations and other possessions of the British capitalists, or business men, in the non-industrial countries of Asia and Africa, particularly, made them a great deal of money.

The sums of money which business men of Great Britain invested in other lands were tremendous. They were so large it is hard for us to imagine them. Before the War each year about \$1,000,000,000 went out of the country.

Altogether something like \$20,000,000,000 had been invested in foreign countries by Englishmen. That is a stupendous sum of money to go out of one country!

Of course, these capitalists felt that their property should be protected from the natives of these far-away lands. They also felt that they did not want business men from other countries to come in and get rich, too. They wanted these countries wherever possible to be included in the British Empire. They felt that their interests would be better protected by their own government than by some foreign government.

So it came about that the British Empire grew as British industry and trade developed, and as British capitalists invested in foreign lands.

IMPORTANT EXERCISE TO DO AS YOU READ HOW ENGLAND  
BUILT UP HER EMPIRE

THERE WERE THREE GREAT REASONS WHY ENGLAND, AS SHE  
BECAME INDUSTRIALIZED, TOOK LANDS AND PEOPLE  
IN MANY PARTS OF THE EARTH

1. Because they furnished markets for English manufactured goods.
2. Because they could supply England with food and with valuable resources such as coal, iron, oil, rubber.
3. Because they occupied important positions on important trade routes.

TAKE THREE PIECES OF PAPER AND AT THE TOP OF EACH  
WRITE ONE OF THE REASONS FOR WHICH COLONIES WERE  
ADDED TO THE EMPIRE.

AS YOU READ ABOUT THE COLONIES OF THE BRITISH EMPIRE  
WRITE DOWN THE NAME OF EACH COLONY IN WHICHEVER  
CLASS IT BELONGS. IF THE COLONY IS VALUABLE FOR MORE  
THAN ONE REASON, WRITE THE NAME IN TWO OR THREE  
(WHICHEVER ARE NECESSARY) CLASSES.



## I. CANADA IS ONE OF THE LARGER COLONIES

CANADA IS VALUABLE FOR ITS FOOD PRODUCTS  
AND ITS RAW MATERIALS

The eastern part of Canada and what is now the United States were added to the British Empire during the 1600s and 1700s. In those days North America was a continent of vast forests. The timber from these forests was badly needed by British ship builders. In addition there were other valuable products such as furs, gold, and grain to be procured from North America.

Of course, the United States was lost to England by the Revolutionary War, but Canada was kept in the Empire. During the 1800s and as late as 1905, new territory was added to Canada until it became the tremendous colony it is today.

It contains over 3,000,000 square miles, and has a population of almost 9,000,000.

How does the population and area compare with our own? Is Canada *more* or *less* thickly settled than the United States?

The people of Canada are much like the people of the United States. Their cities and farms are not very different from our own, except that Canada is more an agricultural and less an industrial country than the United States.

## CANADA IS VALUABLE TO THE ENGLISH

Great sums of British money are invested in the farms, mines, and factories of Canada.

Canada possesses valuable raw materials such as iron, nickel, asbestos, copper.

Canada, although she carries on a larger trade with the United States than with the British Isles, *does* carry on a tremendous trade with England and the rest of the United Kingdom. She sends her cheese (one half of all the cheese used in the United Kingdom), salmon, apples, great quantities of wheat and wheat flour, and also a great deal of timber.

In return English manufacturers find in Canada a market for clothes, hats, and shoes, cotton cloth, earthenware, steel, machinery, woolen cloth, and other manufactured goods.

The United Kingdom gets food and raw materials from Canada; Canada gets manufactured goods from the United Kingdom.

## II. AUSTRALIA IS ANOTHER COLONY WHICH IS IMPORTANT TO THE UNITED KINGDOM AS A SOURCE OF FOOD AND RAW MATERIALS, AND A MARKET FOR MANUFACTURED GOODS

Australia, which occupies a whole continent, has been settled largely by Englishmen, as Canada and the United States were.

When Was Australia Added to Britain's Empire?

Turn back to the map of Fig. 33 for the answer to that question.

Is Australia a Crowded Country Like England?

No doubt you now have a picture in your mind of England's crowded cities—her mines and smoking factories, her fine roads and thousands of miles of humming railways.

Do you have the same picture of Australia? Is Australia a small island too, with tens of millions of people crowded in?

No, Australia is a great continent. You have compared it with Europe and America. You know how huge it is.

Are you astonished to find that it contains only five million people—5,436,794 in 1920, to be exact. Less than two people on the average to each square mile of territory! England has 400 to the square mile. What a contrast!

Compare this with the population of India.

The map of Fig. 1 shows you how they live, scattered around the south-eastern edge of the continent.

## AUSTRALIA IS A NEWLY SETTLED COUNTRY

"I recall that trip with great pleasure. We were going pretty well all day long, over made roads too, and most of them quite good ones. Their chief drawback was an occasional drainage gully running across them, which, if you were going fast or the car took it at right angles, would send you flying up and knock your head against the frame work of the hood and down again with a terrific bump. I should think it is very likely that, considering its population, New South Wales has the biggest mileage of good made roads of any country in the world. They are largely the work of the early convicts, and have resulted in the State being fairly continuously settled from north to south. I had another longer motor trip later on, right up to the Queensland border, and this first one took us near the Victorian border, so that I covered nearly the whole long coast-line by road; and

although one could go for many miles without seeing any human habitation, still one formed the general impression of an inhabited country and not of an entirely new one.

"There were pretty villages, too, in those southern districts—at least—villages pretty by comparison with the ugly wooden, galvanized-roofed, untidy collection of buildings which mostly take the place of villages in Australia. And the scenery was for the most part beautiful, especially as long as we were in sight of the coast.



FIG. 56. Australia is a Sheep Raising Country <sup>1</sup>

"On these long motor trips one gains an idea of how sparsely settled the country really is. There are districts where one may go for miles through cultivated country, but they are rare. It is more unusual to go for miles and miles through unreclaimed bush, and every now and again to strike a clearing. In the slow course of years more and more land will be cleared; but it will probably not be within the experience of any one now living that long stretches of unreclaimed bush will not be the rule rather than the exception.

"But in spite of its monotony, of dull-coloured tree and dull-coloured undergrowth on ground sparsely grassed, the charm of it sinks in during part

<sup>1</sup> Marshall, Archibald: *Sunny Australia*, Hodder and Stoughton, London, 1911; opp. p. 178.



of this journey we were going up and down wonderfully engineered zig-zags, with rocky gorges on one side of us, in which the tree ferns flourished and there was every now and then a trickle of water. Sometimes, turning a corner, we would come upon a string of wagons laden high with bales of wool, and drawn by many horses, or a coach, which is still a frequent mode of conveyance over a great part of the country, or a buggy, or a man on horseback, but never anybody walking, unless it was within a few yards of a settlement.”<sup>1</sup>



FIG. 57. A Wheat Field in Australia<sup>2</sup>

#### SHEEP AND WHEAT ARE THE GREAT AUSTRALIAN PRODUCTS

Australia has more sheep than any other country in the world.

The sheep raising industry, like all of Australia, is new. In 1788 there were 29 sheep on the whole continent. In 1891 there were 106,260,000 sheep. Drouth cut down the number after 1891, but it began rapidly to rise again.

The picture of the wheat field in Australia might almost be a wheat field in North Dakota, mightn't it? Australia, like our wheat states in the Northwest, produces great quantities of wheat.

<sup>1</sup> Marshall, Archibald: *Sunny Australia*, Hodder and Stoughton, London, 1911, pp. 65-67.

<sup>2</sup> Marshall, Archibald: *Sunny Australia*, Hodder and Stoughton, London, 1911,



It's not surprising to you, then, is it, that Australia is valuable to the United Kingdom for the food and raw material it can export.

Indeed, England gets from Australia wheat, wool, tallow, hides, mutton, butter, beef, and other animal products.

Australia is also an important source of valuable metals, such as gold, silver, copper, and lead.

wearing apparel, machinery, manufactured iron and steel articles, and

In return Australia buys most of her manufactured products, such as cotton and woolen goods from the United Kingdom.

*The United Kingdom and Australia depend upon each other  
much as the United Kingdom and Canada do.*

#### EXERCISE

Make a list of the ways in which Canada and Australia are alike.

### III. INDIA IS PERHAPS THE MOST IMPORTANT COLONY IN THE BRITISH EMPIRE. ITS HUNDREDS OF MILLIONS OF PEOPLE FURNISH A MARKET FOR GOODS, AND RAISE AGRICULTURAL PRODUCTS WHICH ARE EXPORTED TO THE UNITED KINGDOM

Look closely at Fig. 58, the picture of a street in Calcutta. What stands out in this picture as different from the towns you know? What stands out as like the towns you know?

India is a mixture of the old and the new. For India is a country with an old civilization—it had a fine culture when our ancestors were living in their little closed-in manors. But India did not change much—the country did not develop into a manufacturing country as England did. *It was not until Englishmen came in and controlled India that railroads, were built, telephones and telegraph systems installed, and the wheels of factories started.*

In spite of the things that have happened in recent years, India is chiefly the old India—the agricultural India.

England's connection with India goes back a long way.

The East India Company, an English trading company, began to trade with India in 1608.

It was not until 1774, however, that a part of India became actually British Territory. Look at the map of the British Empire, Fig. 33, and see what part of India was added to the British Empire before 1800.

Then, during the 1800s more and more of India was added to the British Empire. As British business men found India a good place to sell their manufactured goods and to get food and raw materials, their government took more and more control of India. In 1876, Queen Victoria of England made herself the "Empress of India."



FIG. 58. One of the Main Streets of Calcutta, a City of India <sup>1</sup>

#### INDIA HAS A TREMENDOUS POPULATION

Look back at the population map of the world in Section I, Fig. 1, and see how black India is.

Almost 329,000,000 people live in this territory—three times as many as in the United States! The country is much more closely packed with people than is most of the United States. In India there are, on an average, 177 people to the square mile.

How does this compare with Australia? With Canada? In the United States there are, on an average, only 35 people to the square mile.

Do you see that in parts of India there are 512 people to each square mile?

<sup>1</sup> *Asia*, Vol. XXIII, March, 1923, New York, p. 191.

Why is the Population so very dense in some parts of India?

What has rice-growing to do with it?

We have seen that population is dense wherever there are industrial regions, for great cities and industries grow up around coal mines.

But India is not an industrial country. Three-fourths of her great population live by agriculture.

You have learned that the agricultural regions of the United States are thinly populated. Why is it different in India?

Because India has a different kind of climate and hence has different crops.

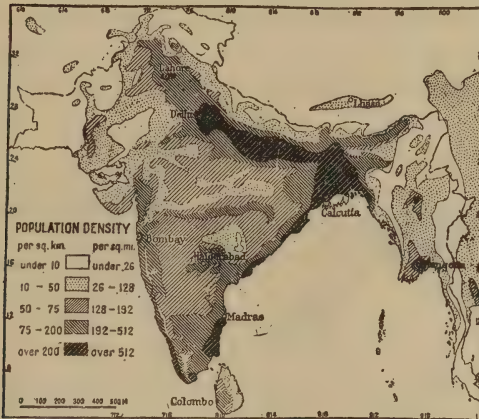


FIG. 59. The Population of India <sup>1</sup>

Much of India is warm and damp—a climate suitable for *rice*. Indeed, rice is grown in nearly one-third of the crop raising area of the country.

Now, wherever rice can be grown in great quantities many people can live, although poorly. *And rice requires many people to cultivate it.*

So, wherever you find large rice-growing districts you find many people.

Look again, at your world map of population. *China and India are very black. Both are rice growing regions.*

The other black regions of western Europe and eastern United States are industrial.

Strange, isn't it, that these two things should lead to densely settled areas—rice and machine manufacturing?

<sup>1</sup> Bowman, Isaiah: *The New World*, World Book Company, Yonkers, New York 1921; p. 48.



## INDIA RAISES WHEAT AS WELL AS RICE

India is also a great wheat growing country. Large quantities of wheat are exported to the industrial countries.

Look at Fig. 60 and also at Fig. 59 showing the population of India. Do you see any relation between the rice growing districts of India and the districts with the largest population?

THREE-FOURTHS OF THE POPULATION OF INDIA LIVE  
ON THE LAND AND ARE VERY POOR

If you remember the story of India in the first section, you will remember that most of the people of this country are poor.

"The Indian peasant is 'the most frugal in the world.' He lives in a thatched or tiled hut with walls of mud or plaited straw. His wants are

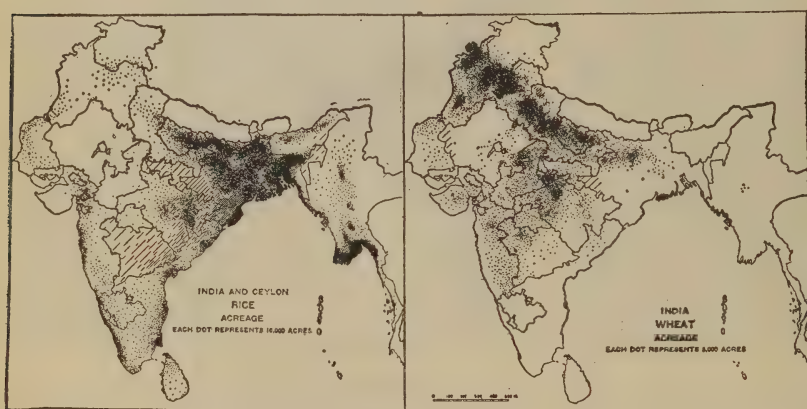


FIG. 60. Where the Wheat and Rice of India are Grown <sup>1</sup>

very few, and they are supplied by the local artisans and menials whom he sometimes pays with a share of the harvest. . . . Thanks to our warm climate, our need of clothing is reduced by nature to the minimum consistent of decency. The Indian standard of comfort is very low. . . . As a European observer has remarked, 'Why the Indians live is the question ever forcing itself for answer. It is not that they may enjoy food; all that they eat is some coarse grain. . . . It is not for pleasures; all their enjoyment is a pilgrimage'. . . . It is impossible for them to buy any luxury, home-made or foreign, except the cheapest—and that, too, they can buy only when brought to their doors.' <sup>2</sup>

<sup>1</sup> Ibid, p. 50.

<sup>2</sup> Sarker, Jadunath: *Economics of British India*, Longman's, Green and Company, 1920; pp. 145-146.



WHEN THE CROPS FAIL AND THEY OFTEN DO, MANY OF  
THE PEOPLE IN THESE CLOSELY PACKED  
AREAS DIE OF STARVATION

When There Was a Famine in India

"The tragedy had happened during a season of famine and influenza, when a pair of cattle sold for \$3, fine babies went for \$1 a piece, and men and women lived or died on a diet of grass seed gruel. The outcast man and woman and three children who lived in the hut left home and for three days wandered about looking for something to eat. At last on the fourth day, a kind-hearted man gave them a meal. They would not eat it till they had washed. They tied the food carefully in a piece of cloth, brought it home and left it in their hut while they went to the well. Then, having made themselves clean, they came home with joyful faces, to break their long fast. During their absence, however, the roof had caught fire and the house burned. Immediately as was natural of Indians, they thought that they had incurred the displeasure of God. Thereafter life could have no meaning for them. In despair the man led his wife and children back to the well. First he threw the children in, one at a time, and then his wife, and finally he himself jumped in. So there remain only the crumbling mud walls of the hut to remind the villagers of this family who could starve but could not endure the curse of God.

"Even in normal times Indian villages swarm with the hungry. When I was in boarding school as a boy, my roommate and I cooked our own food. The poor in the neighborhood knowing that the school housed a hundred boys who had enough to eat, used to come in procession one after another, begging us for food. A morsel here, a morsel there, and soon we had given away all that we had prepared for ourselves and had to cook more or go unfed." <sup>1</sup>

In the Rural districts of India handicrafts and trade are carried on much as they were during the Middle Ages in Europe

Handicrafts, however, are dying out in competition with manufactured goods from the United Kingdom.

"In nearly all the rural parts of India, handicraftsmen supply the few simple wants of the villagers, or the latter go to the neighboring town once or twice a year to make their purchases. But certain places in India have been famous for their special handicrafts; which go to all the markets of India, e. g., the pottery of Bidar, the embroidery of Ahmadabad, the printed cloths of Bimdaban, the brass work of Benares.

<sup>1</sup>Swamidoss, Daniel: *A Way Out for Rural India*, Asia, New York, March, 1923; p. 198.

"The simple crafts of the hamlets are still the most important. . . . of all Indian industries. The weaver, the blacksmith, the potter, the oilpresser, the brazier . . . . have a sure market for their goods and their trades are regularly taught to the rising generation. But in the last few years mill-woven cloth from England has penetrated to every nook of India. The weavers beaten by the new machinery, have mostly abandoned their trade, while a few eke out a scanty living by making towels and coarse coating. The blacksmith in most places has lost his chief business of turning out *new* plough-shares, hoes, and big knives, which are now imported from foreign countries; but he continues to make less important articles, as he knows the different shapes of the tin or metal utensils of domestic use which different localities prefer.



FIG. 61. Indian Women at Their Spinning Wheels <sup>1</sup>

"The trade in the interior of India . . . is entirely conducted by the people of the country. . .

"In every fairly large village . . . markets are held twice a week, the stall keepers visiting different villages on the days fixed for each. Permanent shops are found only in the biggest villages, which aspire to be towns. In the petty hamlets there is sometimes a resident store-keeper who combines agriculture with retail trade. He has no regular shop, but keeps his store inside his house and brings out the things as his customers call for them. During the farming season he opens his 'shop' only after his return from the field. A most important trading place is the 'mela' or fair, held once a year on some religious occasion, at which the people of many villages assemble and a brisk trade is carried on. . . .

<sup>1</sup> *Asia*: New York, Vol. XXIII, March, 1923, p. 199.

"... The Indian cultivators are at once the chief producers and consumers of the country. They expect the dealer to come to their own doors. Hence an army of peddlers or travelling salesmen is spread over the country, chiefly in winter, going from village to village with their wares and supplying the local needs for miscellaneous goods, especially metal utensils and European manufactures. . . Difficulty of transportation is no hindrance to this branch of trade, because each peddler's stock is small and can be carried on the head of a coolie or the back of a pack-animal."<sup>1</sup>

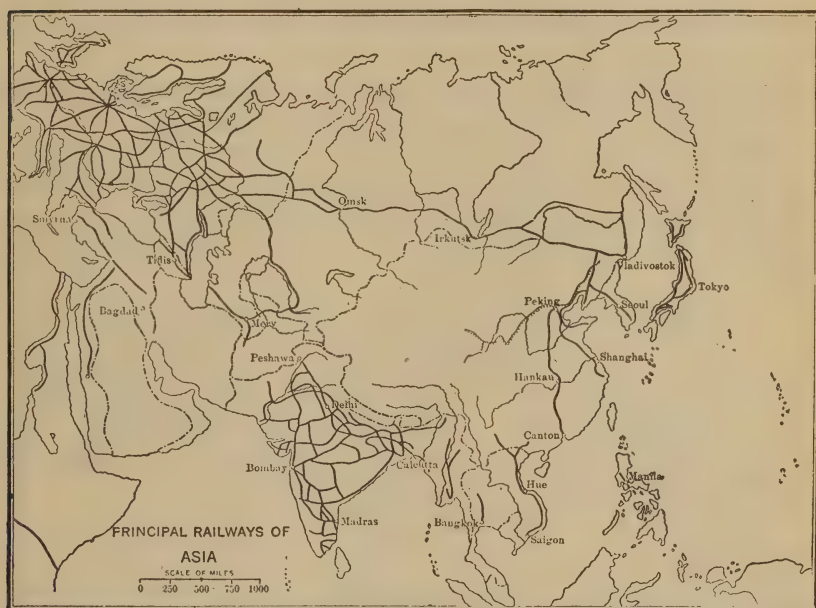


FIG. 62. The Railways of Asia, Showing How Well Supplied India is With Railways<sup>2</sup>

FOREIGNERS, PARTICULARLY THE ENGLISH, HAVE BEGUN  
TO DEVELOP INDIA INDUSTRIALLY

"The transition of England from an agricultural to an industrial country and the replacement of handicrafts by steam or electric power manufactures, are due entirely to the Europeans. Foreign capital and enterprise have *introduced* into our country *many industries* which would have been unknown at least for many years, but for them. As a result we manu-

<sup>1</sup> Sarkar, Jadunath: *Economics of British India*, Longmans, Green & Company, London, 1920; pp. 78-87.

<sup>2</sup> Huntington, Ellsworth: *Principles of Human Geography*, John Wiley and Sons, New York, 1921; p. 3.



facture much more than formerly. The new undertakings begun by the British government and the Europeans give employment to more than three millions of people. . . .

"We own railways, post and telegraph offices, and cinchona plantations to government (backed by foreign capital). Jute mills, woolen mills, paper mills, gold-mining on scientific lines, breweries, modern tanneries, and leather works, rice mills, saw mills, and rubber plantations (in Burma), silk filatures, tile factories, indigo factories with modern equipment, and dock-yards are almost entirely owned by Europeans."<sup>1</sup>

True, some factories are owned by native Indians, but for the most part it is the English who own the factories, railroads, and other industrial enterprises in India.

Fig. 62 shows how many railways there are in India in comparison with the rest of Asia. Over 37,000 miles more than in all England!

These railways carry British manufactured goods into the heart of India, and carry out again wheat, rice, and metals to be shipped to England. They encourage the building of factories. They are a measure of the interest of English business men in India.

#### DOES THE UNITED KINGDOM CARRY ON A VERY LARGE TRADE IN INDIA?

Yes, a tremendous trade. India buys more goods, particularly cotton goods, woolen goods, machinery, iron and steel manufactures, wagons, and trucks from England than she does from any other country.

In spite of the poverty of the people, India buys a very large amount of English goods.

From India, England buys large quantities of tea, wheat, rice, cotton, cotton and flax seeds, jute, wool and leather—food and raw materials necessary to an industrial country.

Thus English business men have profited greatly from India and English industries and the English people depend upon Indian products and Indian markets. India is by far the most valuable colony in the British Empire.

And in the meantime Englishmen are making India into an industrial country.

---

<sup>1</sup> Ibid: pp. 186-188.

#### IV. WHY IS THE MEDITERRANEAN REGION OF SUCH TREMENDOUS IMPORTANCE TO ENGLAND

##### THREE REASONS:

1. HERE IS THE PATH TO INDIA, THE MOST VALUABLE OF THE COLONIES.
2. HERE ARE MARKETS FOR MANUFACTURED GOODS.
3. HERE ARE IMPORTANT RAW MATERIALS.

What is the route which British ships take to India and to other eastern ports?

Look back at your map of trade routes, Fig. 50, and see.

In the old days the vessels went around Africa and up again to Asia, or they carried the goods to the east shore of the Mediterranean from where

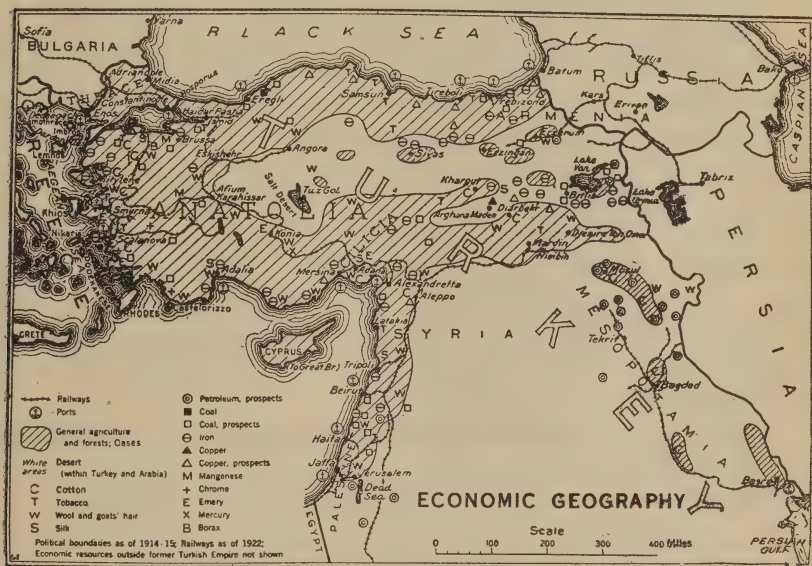


FIG. 63. The Resources of the Lands at the East End of the Mediterranean, Asia Minor, Syria, and Mesopotamia <sup>1</sup>

it was sent by land across Palestine and down the Mesopotamian Valley to the Persian Gulf. This was done until after 1850.

Then in 1869 a canal, the Suez Canal, was completed joining the Mediterranean and the Red Seas and cutting Africa and Asia apart.

Today most of the ships sailing between European and even American ports and India, the rest of Asia, and Australia, sail the coast of Spain, go through the Mediterranean, into the Suez Canal through the Red Sea and the Indian Ocean, and so on to their destination.

<sup>1</sup> *Our World*: July, 1923, New York, p. 8.

You can see that the Mediterranean is extremely important as a pathway from Europe to the East.

Even before the canal was cut, the Mediterranean was the great center of trade between Africa, Asia and Europe.

Do you see that it lies between these three continents?

Around the shores of the Mediterranean are important markets for manufactured goods and valuable raw materials such as petroleum, iron, and other metals, cotton, and so on.

Point out on the wall map the region shown in this map.

Find the particular region in which each resource is most abundant.

The Mediterranean region ". . . extends from the Strait of Gibraltar to India, and from Austria-Hungary to the Indian Ocean. Round about it are twenty States and nearly 350,000,000 people who are dependent upon it for access to the outside world. . . .

"British bankers have put great amounts of money into railroads, banks, and other enterprises in this part of the world. Over \$375,000,000 is invested in Egypt alone. Her financiers have large interests in Asia Minor, Mesopotamia and Persia. But the greatest interest of Great Britain is the sea route to the East. This is more important than all other British interests in any part of the world. For the Mediterranean links England with India, Australia, East Africa, and her Far Eastern possessions. It is the route of shipping of which England controls nearly 40 per cent of the world's tonnage. Even the industrial life of Great Britain, which employs one half of her population is dependent upon the Mediterranean remaining in friendly hands. Bismarck termed the Suez Canal 'the spinal cord of the British Empire.' " <sup>1</sup>

You can see why England was anxious to get control of the important points on the Mediterranean.

Examine the map carefully and see what you think these points are.

### ENGLAND HOLDS THE MOUTHS OF THE MEDITERRANEAN

You see that the Mediterranean is almost like a lake with land all round it. But not quite. At the western end, a narrow strip of water connects this inland sea with the oceans outside.

At the western end of the Mediterranean the fortress of Gibraltar stands guard over a narrow channel. This is the most important fortress in the world, because its guns can keep ships out of the Mediterranean.

And England holds Gibraltar. If she wishes, she can close the path to Constantinople and the Black Sea region, and the path to the far east.

<sup>1</sup> Howe, Frederic C.: *The Only Possible Peace*, Charles Scribner's Sons, New York, 1919, p. 33-35.



At the other end of the Mediterranean an artificial mouth has been dug through the narrow strip of land which connects Africa and Asia. This mouth is the Suez Canal. England holds the Suez Canal. It was built by the French, but during the 1870s the English government got control of it.

*Thus England holds both mouths to the Mediterranean Sea.*

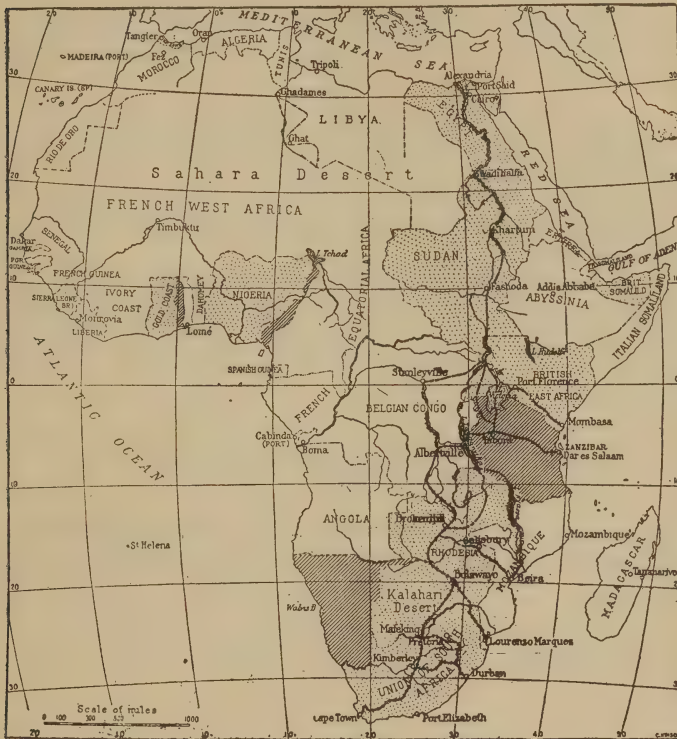


FIG. 64. On this Map You Can Find Egypt and the Soudan <sup>1</sup>

## V. ENGLAND MUST CONTROL LAND NEAR THESE MOUTHS

EGYPT AND THE SOUDAN ARE VALUED BY ENGLAND  
CHIEFLY BECAUSE OF THEIR POSITION ON THE  
TRADE ROUTE TO THE EAST

Do you find on the map Egypt and south of it the Soudan? Do you see its relation to the Suez Canal?

Englishmen believed that if an unfriendly power held this region, English trade through the Suez Canal might be interfered with.

<sup>1</sup> Bowman, Isaiah: *The New World*, World Book Company, Yonkers, New York; p. 59.

During the 1880s France and England together got control of Egypt. However, they quarrelled with each other over their rights in all this region of northern Africa. In 1904 England was left free by an agreement with France to do as she wished with Egypt and the Soudan.

#### WHAT KIND OF A COUNTRY IS EGYPT?

Down through the deserts of the northern part of Africa flows the Nile River. On each side of the river are strips of fertile country where wheat and cotton are grown.

Most of the 13,000,000 population of Egypt are farmers in the rich fields of the Nile. These Egyptians buy many of the British products and send out to England cotton yarns and cloth.

In addition, the business men of the British Isles have great sums of money invested in Egypt.

Egypt, then, is valuable to England for its location, for its agricultural products, for its markets, and for the opportunities it gives British business men to invest their money in the building of railroads, the establishment of banks, and in trade.

#### THE SOUDAN IS PARTLY DRY GRAZING COUNTRY AND PARTLY FARMING COUNTRY

In the Soudan, as in Egypt, there are little villages of farmers.

There are also dryer regions where there are herds of camels, cattle, sheep, and goats.

The people of the Soudan are Arabs, much like the Arabs of Arabia, and negroes somewhat like those of the forests of central and southern Africa.

#### Omdurman, a Town in the Soudan

"... Omdurman, with its misty hills in the background, lies just below Khartum, at the junction of the Blue Nile and the White. With the donkeys and the noisy crowd of natives you slip down the steep mud embankment at Nogren Point early some morning, and clamber on to the steam ferry plying between Khartum and Omdurman. In a few moments you are at the junction of the two rivers, where for a mile or so the different-colored waters—the chocolate water of the Blue Nile and the reddish-brown water of the White Nile—flow side by side before they churn together and finally merge in the great river that has only one small tributary from this point all the way down to the delta. After passing the island of Tuti, with its settlements of conical grass huts and vegetable gardens, painted vivid green against the mud flats of the low Nile, the ferry deposits you at the

boat harbor of Omdurman, picturesquely filled with *gyasses*. On the sand innumerable donkey-boys and dragomans try to persuade you to rent their conveyances. If you pass them in safety, however, you may mount a steam tram, which carries you quickly enough to the center of the town. . . . It is the large market that must prove most interesting, for here are congregated in a confused medley representatives of many African tribes. Strange are the methods of tattooing, of shaving the hair, of dressing, practised by all these little-known peoples, who have been drawn together here through a fanatical enthusiasm for pilgrimages, for the sake of trade, or because of war and the devastation of vast provinces.

"The streets converging toward the market are lined with small shops where silversmiths, ivory-carvers and workers in rhinoceros-hide are busy with their trades under your eyes. The market itself is a great sandy square with rows of mat sheds, where camels and donkeys scuff the sand into your eyes and throat, where strings of glass and amber beads, gay basket-hats, wood, ostrich feathers, salt and dates, toilet-butter, cosmetics, dried spices and orange shoes form the chief articles of purchase and barter. Beggars sing to you that Allah will reward your generosity. An old woman comes by with puppets that seem to have some mysterious religious significance. Younger women thrust themselves boldly forward to be photographed, with grimaces for the benefit of the onlookers and loud demands of *bakshish* to profit themselves. The sun beats down mercilessly until your head swims. The purple-black patches under the mat sheds dance madly against the glaring sand. Flies swarm over everything. From some mud hut comes the eternally barbaric beat of a tom-tom.<sup>1</sup>

---

EGYPT AND THE SOUDAN ARE VALUABLE TO THE UNITED  
KINGDOM AS A MARKET FOR GOODS AND AS A SOURCE  
OF AGRICULTURAL PRODUCTS BUT CHIEFLY FOR  
THEIR POSITION. ENGLISH TRADERS WISH  
TO HAVE THEIR TRADE ROUTES  
PROTECTED

---

<sup>1</sup> Emerson, Gertrude: *An African Interlude*, Asia, Vol. XXII, September, 1922; p. 693



## VI. THE MESOPOTAMIA VALLEY AND PERSIA ARE VALUABLE TO ENGLAND FOR THEIR RAW MATERIALS, FOR THEIR MARKETS, AND FOR THEIR POSITION

Find Mesopotamia and Persia on the map. Notice that they are close to India, and that they lie between India and Europe. England has been anxious to control both of these regions, partly because they lie on the land route to India.

### MESOPOTAMIA WAS FINALLY ADDED TO THE BRITISH EMPIRE AFTER THE WAR

If you do not remember about Mosul and Bagdad, cities of Mesopotamia, go back and re-read the descriptions of them in the first section, and again, as Marco Polo described them, in the second section.

Mosul, you remember, was known even in Marco Polo's day to be an oil region.

Petroleum is in great demand in the modern world to run ships and machines.

Therefore, the business men of all the industrial nations were interested in Mesopotamia, and the great nations, particularly England and Germany, struggled to gain possession of this region.

As you know, England was on the winning side in the war. So she was permitted by France and the United States to add Mesopotamia to the British Empire.

Look back at the map of the resources of western Asia, Fig. 65, and see where these oil fields are located.

### TWO GREAT NATIONS FOUGHT FOR PERSIA

In the early years of the twentieth century England was carrying on a contest with Russia for the right to build railroads, establish banks, carry on trade, and dig oil wells in Persia.

In addition, England was afraid Russia would move down too close to her pet child, India.

Finally, in 1907, they agreed that Russia should carry on her business with the north of Persia, and England with the south.

Persia has been extremely profitable to British business men. The Persians buy English goods, great quantities of cotton goods particularly.

The petroleum of Persia has gone out to run English ships and English machines and has enriched the Englishmen who own the wells.

Furthermore Persia has other valuable mineral products, such as iron, coal, copper, lead, and nickel.

And she sends out fruits, woolen carpets, rice, and other products.

England has over half the trade of Persia today.

From this map you can see what tremendous supplies of oil are to be found in Mesopotamia and Persia.



FIG. 65. Where the Petroleum of the World Is to Be Found <sup>1</sup>

#### MAP EXERCISE

#### MAKE A MAP OF THE PRINCIPAL OIL DEPOSITS OF THE WORLD

- On an outline map of the world color in the following outstanding known oil fields:
  - In the United States: the Oklahoma, Pennsylvania fields.
  - In Mexico.
  - In Russia: Baku, Batum. . . . .
  - In Asia Minor: Mosul.
  - In Africa.
  - In Asia.
  - 
  -
- Exchange maps with a neighbor. Correct his map, writing on the margin the name of each deposit which is correctly located. Return your neighbor's map and receive your own.

<sup>1</sup> Huntington, Ellsworth: *Principles of Human Geography*, John Wiley and Sons, New York, 1921; p. 198.

3. Learn the location of each deposit that you missed. Try to follow these steps:

First: Compare your work with the correct location on a geography map. Note exactly wherein your work is wrong.

Second: Close your eyes and try to see in your mind a correct picture of each location that you missed.

Third: Study the geography map again to see if the picture in your mind was correct.

Fourth: If not study the map carefully then close your eyes and try this process until you can picture correctly each location that you missed.

Fifth: On a clean map repeat the test, exchanging papers again with your neighbor correcting his test and having him correct yours.

## VII. NOW WE COME TO THE VAST CONTINENT OF AFRICA WHICH THE INDUSTRIAL NATIONS HAVE DIVIDED UP BETWEEN THEM

A writer on Africa says:

"In hewing out for himself a fixed abode in Africa the white man has massacred the African in heaps. The African has resisted and persisted.

"In the process of imposing his political dominion over the African, the white man has carved broad and bloody avenues from one end of Africa to another."<sup>1</sup>

The coming of the white man into undeveloped non-industrial countries often has meant sorrow and hunger and death to the natives. But for the Africans it has been the worst of all. Do you remember the stories of Africa in the first section? The African was less able to protect himself than were the natives of the old civilizations of Asia.

By 1914, when the Great War had broken out, Africa had been divided among the great industrial nations.

Only two small countries, Abyssinia and Liberia, remained in the hands of the natives of Africa.

This map of Africa shows how the great dark continent was divided up in 1914.

Ibid. p. 7.



Compare this map with Africa as seen on the map of the British Empire. Do you see any difference between the two maps? What has happened to the regions in Africa which the German government held before the War? Today England and France between them hold most of Africa.



FIG. 66. Africa as it Was Divided Among the Industrial Nations in 1914 <sup>1</sup>

<sup>1</sup> Morel, E. D.: *Africa and The Peace of Europe*, B. W. Huebsch, Inc., New York.

Why have the great industrial nations been so anxious to possess Africa? What was there in the forests and jungles and mountains and deserts of Africa which attracted them?

Early in the 1800s it was slaves, but as the slave trade died out, other products, even more valuable than the black men who could be taken as slaves, were found.

### Africa Is a Land Marvelously Rich In Its Resources

Africa has gold and silver and diamonds, petroleum, copper and tin, rubber and coffee, cotton, palm oil, cane-sugar, bananas, and tobacco in great abundance. All these riches were there for the business men of the industrial countries to seize and send out to the rest of the world.

This they have done.

### THE STORY OF THE COMING OF THE WHITE MEN IN RHODESIA

#### FIND RHODESIA ON THE MAP OF AFRICA

"Between the Zambesi and Limpopo rivers stretches a country some 148,000 square miles in extent, i. e., just about three times the size of England. It is now known as Southern Rhodesia. In 1911 it contained 23,606 white, 744,559 African natives, and 2,912 Asiatics and other 'coloured persons.' In the twenty-four years, 1890-1913, it yielded 6½ million ounces of gold.

"In the middle of last century this country was occupied by a ruling African people, now called popularly the "Matabele," which means 'the naked men with shields.' They had conquered the other neighboring tribes—the Mashonas and Makalakas. . . . Now, although the Matabele had subdued these tribes by force they were very fair to them.

An impartial writer who had lived in the country has placed it upon record that under the Matabele, the Mashonas increased both in numbers and in cattle, always a sure sign of the prosperity of a South African people. 'They say themselves,' he adds, 'that they preferred the Matabele rule to European rule because under them they were troubled but once a year, whereas now their troubles came with each day's rising sun.'

"The story which follows is the story of what befell the 'naked men with shields' at the hands of the clothed men with guns"—that is the Europeans who came seeking for 'concessions' to dig gold and other valuables. (A concession is a permit given by a country usually to a private company for the development of natural resources.)

"In the 1870s and 1880s British, Boer (Dutch), Portugese, and German adventurers began wandering about the Limpopo River. Boers and British had been in touch with the Matabele since the early 'fifties. To acquire political influence over the then ruler of this people, by name Lobengula, they made unpleasant remarks about one another. 'When an Englishman once has your property in his hands,' wrote the Boer Joubert to Lobengula in 1882, 'then he is like an ape that has his hands full of pumpkin seeds: if you don't beat him to death he will never let go.' But Lobengula was partial to the British. In February, 1888, at his capital, Buluwayo, he signed a treaty with an official of the British Government, in which he undertook to hold no communications with any 'foreign State or Power.' It was stipulated in the treaty that 'peace and amity shall continue forever between Her Britannic Majesty, her subjects, and the Amandebele (Matabele) people.'

"That the country over which Lobengula held sway, was passing rich in gold, had gradually become known in South Africa. The signing of this treaty had been preceded, and was followed by numerous efforts on the part of rival corporations to secure special privileges from its ruler. In the October following the conclusion of this bond of friendship, Messrs. Rudd, R. Macguire (a member of the British Parliament), and Mr. F. R. Thompson, commissioned by Mr. Cecil Rhodes and by Mr. Alfred Beit, succeeded in getting Lobengula to append his signature to a document. By its terms, in exchange for a monthly payment of £100, 1,000 Martini-Henry rifles, and 100,000 rounds of ball cartridges, they obtained 'the complete and exclusive charge over all metals and minerals in the country.'"

This document became known as the Rhodes-Rudd concession.

"Very shortly after Lobengula had signed the Rudd concession, the rumour became current among the Matabele that their ruler had been induced to part with his people's rights in their land. Lobengula sent in hot haste for certain British missionaries with whom he entertained friendly relations, showed them a copy of the document, and asked them for their opinion. They appear to have confirmed the popular fears. Whereupon Lobengula caused his Head Counsellor, who had advised him to sign (the treaty) to be executed as a traitor, and despatched two other counsellors to London on a mission to Queen Victoria, begging her to 'send someone from herself' as he had no one he could trust, and he was 'much troubled' by white men coming into his country and asking to dig for gold.

"Lobengula was told by the British that it was 'impossible for him to exclude white men', and that it was in the interests of himself and his people to make arrangements 'with an approved body of white men who will consult Lobengula's wishes and arrange where white people are to dig, and who will be responsible to the chief for any annoyance or trouble caused to

himself and his people.' The letter went on to say that the Queen had made inquiries as to the persons concerned and was satisfied that they 'may be trusted to carry out the working for gold in the chief's country without molesting his people, or in any way interfering with their villages, cultivated fields, or cattle.'

"In such fashion were powers of government and administrations, involving the establishment of a police force, the making of laws, the raising of revenue, the carrying on of courts, the construction of public works, the grant of mining and forestry concessions, and so on, in an African country three times the size of England, given to a corporation, whose interest in that country was to make money out of it."<sup>1</sup>

At first the Company's agents avoided the Matabele people, but began their mines, settlements, and forts.

After a year and a half the British government went further than it had originally and declared that it would take charge of Lobengula's country.

Now the Rhodes-Rudd company decided that it was time to smash the native king and his kingdom. So they gathered together a force of men, and made their plans for a fight with the Africans. This same writer telling about what took place, says:

"Lobengula's manner seems to have been marked throughout by a courage, a dignity and a pathetic trust in the British Government's sense of justice which are remarkable. Telegraphing to the company after the massacre of his warriors by Captain Lendy's troops, he says: 'I thought you came to dig for gold; but it seems that you have come not only to dig for gold, but to rob me of my people and country as well.' He refused to accept the monthly payments falling due under the Rudd and Lippert Concessions, as it 'is the price of my blood.'

He repeatedly appealed to the High Commissioner:

"Your people have been telling you lies. . . . They speak like this to make an excuse for having killed my people. How many white men were killed! . . . . My cattle which were taken by your people have not been returned to me, neither have those taken by the Mashona, whom I sent to punish. Perhaps this is why they have killed my people.'

He wrote to the Queen:

"I have the honour respectfully to write and state that I am still keeping your advice laid before me some time ago, i. e., that if any trouble happens in my country between me and the white men I must let you know.'

"Lobengula's anxiety to keep the peace and so prevent the slaughter and ruin of his people which he knew must be otherwise inevitable, is vouched

---

<sup>1</sup> Adapted from Morel, E. D.: *The Black Man's Burden*, The National Labour Press, Manchester, England; pp. 34-36.



for in a number of public statements made at the time or since, by European residents in Buluwayo.

"But the company continued its preparations for the invasion. On October 18, an incident occurred which must have finally convinced Lobengula of the fruitfulness of his efforts to avert the impending doom of his country. He had despatched three of his Indunas as envoys to the High Commissioner. They arrived at the British camp on a 'safe conduct' pledge. In that camp, on the day of their arrival, two out of the three were 'accidentally killed.'

"War had already begun, the final pretext being that one of the Company's patrols had been fired upon by Matabele scouts, forerunners of a great invading army. The 'invading army' turned out to be a phantom one, and the alleged firing upon the Company's patrol was never established.

"In less than three months the war was over. Thousands of Matabele were killed—one regiment of 700 lost 500 of its number. Many fled towards the interior, where they suffered terribly from fever and famine, as well as from wild animals. It is said that 18 of them were killed by lions in one night, in the dense forest. Lobengula, a hunted fugitive, had disappeared and was seen no more. . . . .

"Henceforth the 'naked men with shields' became bondsmen to the Company and its shareholders, as the Mashonas, whom the Company claimed to have saved from Matabele oppression, had already become. The gold of Southern Rhodesia had to be won. It could only be won by native labour. But an African people of herdsmen and agriculturists does not take kindly to digging for gold. Moreover, the Matabele, unlike the Mashonas, had a peculiar aversion to working below ground. Such scruples and prejudices could not be expected to carry weight with the members of the superior race."<sup>1</sup>

The Matabele were gathered together by the thousands and forced to work in the mines of the white men. They had to work for whatever sum the Company offered them—and if they refused to work, they were flogged.

And this is what they said:

"Our country is gone, our cattle are gone, our people are scattered, we have nothing to live for, our women are deserting us; we are the slaves of the white man, we are nobody and have no rights or laws of any kind."

But the British business men and the business men of other industrial countries are making vast sums of money in Africa.

And the valuable products of Africa are going out to all the industrial world.

<sup>1</sup> Ibid. pp. 42-46 (adapted).

Do Not Be Misled Into Thinking That It Is Only Great Britain  
That Has Exploited Native Peoples. All Industrial  
Countries Have Done It At One  
Time Or Another

Later you will study how Belgium ruthlessly took the rubber of the Congo region; how France took away valuable resources and lands of Siam and neighboring regions in Asia; how France, Great Britain and Germany wrung rich concessions out of the Chinese.

Since we are studying the way in which the industrializing of England helped to develop her great world empire we must tell how she got her important colonies.

### RAILROADS ARE BEING BUILT IN AFRICA

As always when the industrial nations push into an undeveloped country, railroads are being built and the region is opened up for trading.

Railroads are being pushed in from the coast toward the vast interior of Africa. On these railroads the riches of the continent are carried out to the ships which take them to far off lands.

### THE CAPE-TO-CAIRO RAILROAD

For years the British have planned a railway which shall extend the whole length of the continent—from Cairo in northern Egypt to Cape Town in the south of Africa. Parts of this railroad have already been built.

When it is completed, it will connect a row of the colonies of Great Britain, thousands of miles long. Think of a huge continent of jungle and forests and uninhabited deserts humming with mines and towns and railroads. Turn back to Fig. 64. This shows the way the Cape-to-Cairo Railroad is binding together the north and the south of Africa.

Even Africa is being tied together and bound with the rest of the world.

---

WE HAVE BEEN STUDYING EXAMPLES OF THE WAY IN WHICH  
A GREAT INDUSTRIAL COUNTRY REACHES OUT INTO UNDE-  
VELOPED REGIONS AND BRINGS THEM INTO CLOSE  
CONNECTION WITH THE INDUSTRIAL WORLD

WE HAVE FOUND THAT MODERN INDUSTRIAL NATIONS MUST  
HAVE THE PRODUCTS AND THE MARKETS WHICH  
NON-INDUSTRIAL NATIONS CAN SUPPLY

THROUGH THIS NEED THE WORLD IS BEING TIED TOGETHER

## EXERCISE

We have found that industrial nations reach out into undeveloped, non-industrial territories, and that many changes take place as a result of this fact.

Make a blackboard list of all the changes you can think of, and opposite in another list write at least one example of each result.

## MAP EXERCISE

## THE LANDS OF THE BRITISH EMPIRE

In addition to a large number of island bases the principal territories of the British Empire are the following:

- |                          |                          |
|--------------------------|--------------------------|
| 1. The British Isles.    | 9. Palestine             |
| 2. India                 | 10. Nigeria              |
| 3. Union of South Africa | 11. Gold Coast           |
| 4. Egypt                 | 12. Tanganyika Territory |
| 5. Canada                | 13. British East Africa  |
| 6. Australia             | 14. South West Africa    |
| 7. New Zealand           | 15. British Guiana       |
| 8. Mesopotamia           |                          |

1. From a map of your geography or from Fig. 33 of the pamphlet, study the location of each of these regions.
2. On an outline map of the world color in and letter each of the foregoing principal territories (*To the teacher: Allow 5 minutes for this test*).
3. Exchange maps with a neighbor. Correct his map, writing on the left margin the name of each region which is incorrectly located. Return your neighbor's map and receive your own.
4. Learn the location of each region that you missed. Try to follow these steps:

*First:* Compare your work with the correct location on a geography map. Note exactly wherein your work is wrong.

*Second:* Close your eyes and try to see in your mind a correct picture of each location that you missed.

*Third:* Study the geography map again to see if the picture in your mind was correct.

*Fourth:* If not, study the map carefully then close your eyes and try this process until you can picture correctly each location that you missed.

*Fifth:* On a clean map repeat the test, exchanging papers again with your neighbor, correcting his test and having him correct yours.

YOU WILL FIND IT INTERESTING TO LEARN MORE ABOUT  
THE MANY DIFFERENT TERRITORIES INCLUDED IN THE  
BRITISH EMPIRE.

We have told you about only a part of the British Empire, and there are many interesting things about the parts we have described which we have not been able to include.

Wouldn't you like to learn more about the people of the British Empire, their customs, the kind of land they live in, their work, and their relations with the outside world?

Suppose you divide the British Empire among the members of the class as follows:

England and Wales	Egypt
Scotland	Nigeria
Ireland	Gold Coast
Canada	Tanganyika Territory
Hong Kong, China	British
Australia	East Africa
New Zealand	Union of South Africa
India	South West Africa
Mesopotamia	British Guiana
Palestine	

#### EXERCISE

##### Do two things

*First:* Find out all the facts you can about the territory you choose. Look up in geographies, atlases, encyclopedias, the *Statesmen's Yearbook*, *The World's Almanac*, or *Daily News Almanac*, books, and magazines. Collect stories, descriptions, and pictures of your territory. Find the answers to as many of the following questions as you can.

1. What kind of a region is it—mountainous, desert, rich farming country?
2. What do the people do for a living? Do they work in factories, or farm, or keep herds, or perhaps do something else?
3. What kind of people are they, how do they dress, how do they live, what customs have they?
4. What trade connections does the region have with the outside world.
5. What methods of transportation are used to keep up this trade?

*Second:* Draw a large map of the region you have chosen, and show with pictures the kind of land and the work which the people of this region do.

You can draw the pictures, or cut them out and paste them on the map. For example, in England you would put pictures of factories in the north



and center of the country. In Wales, there would be mountains, and the mouth of a coal mine. Further south you could show sheep and perhaps a little agricultural village.

#### REVIEW EXERCISE

Now you will want to go back and review all the things that have taken place as England changed from the agricultural country of the Middle Ages to the modern industrial England.

A. Make a list of the important changes you can think of, such as these:

The manor fell into decay.

The fields were enclosed.

The serfs were driven off the land.

You will be able to think of a great many changes of this kind.

Write your own list. Then combine on the blackboard the lists of all the students. Find just as many changes as you can.

B. What are the chief products which England imports? From where do they come?

What are chief products which England exports? Where do they go?

---

WE HAVE LEARNED THAT ENGLAND IS A GREAT INDUSTRIAL AND  
TRADING COUNTRY WHICH IS THE CENTER OF A TREMENDOUS  
EMPIRE. AND THAT IT IS CLOSELY CONNECTED WITH  
THE WHOLE WORLD

---

THE GREAT WAR IS A PROOF THAT ENGLAND DEPENDED ON  
THE WHOLE WORLD, AND THAT INJURIES TO OTHER  
PARTS OF THE WORLD INJURED ENGLAND

The War broke up the old world which existed before 1914. After the War the German and the Russian merchants could no longer buy goods in England. All of Europe was upset by the great calamity. To some extent other parts of the world suffered, too.

Now, no armies marched across England's soil as they did in France, Belgium, Germany, and Russia. In this respect England suffered much less than these countries.

But was she affected by the calamities which came to them?

Was she affected by the fact that far off countries which had formerly supplied food and raw materials and which had brought English manufactured goods, no longer traded with England?

This story shows the way in which some of these trade changes came about.

#### ENGLAND'S TRADE WITH EVEN REMOTE AFGHANISTAN WAS AFFECTED BY THE WAR

##### FIND AFGHANISTAN ON THE MAP OF ASIA

"Afghanistan, has been a closed land, one of the last refuges of unchecked barbarism. Here before the great War a white man went, if at all, at the risk of his life. In the summer of 1915 a native of this no man's land gathered up a few mule loads of country produce and went down 160 miles to the head of the British railway to trade at the annual fair, as was his wont. The market was "glutted"—no buyers were there. He was told that the Hindus who usually bought his wares had gone over the sea to a white man's war. 'Humph!' said the Mohammedan, 'I don't care, I will take my stuff over to the Russian railway.' 'The Russians have gone to the war, too,' he was told, 'and the railroad will carry no freight.' Whereat the indignant native cursed all unbelievers and carried his produce back to his fastnesses where it probably still awaits the return of peace.

"Long, indeed, will be the search to find the people, even the man, whose daily life has not been changed in some respect by the trade disturbances arising from this war. The world trade of 1914 is no more."<sup>1</sup>

Because the great European nations, particularly Germany and Russia, could no longer buy and sell as they did before the War, because trade was interrupted even in the far parts of the world, the factories of England and Scotland closed down and millions of men were thrown on the streets, unemployed, cold, and hungry.

Production dropped; trade dropped. The whole world of trade and industry was out of joint and it still is out of joint. *No man has been able to mend it.*

#### THE WAY IN WHICH BRITISH TRADE WITH OTHER PARTS OF THE WORLD DECLINED DURING THE WAR

"A comparison of 1913 and 1916 shows that Britain received from Argentina a million less tons of shipping, a drop from 2,600,000 to 1,600,000. The out-going ships to Argentina fell away twice as much. From Aus-

<sup>1</sup> Adapted from Smith, J. Russell: *Influence of the Great War upon Shipping, Carnegie Endowment for International Peace*, Oxford University Press, New York, 1919; p. 74.

tralia 400,000 tons less of shipping arrived, while the tragedy of the closing of Russia is shown by the falling away of vessels from 3,300,000 tons to less than 750,000 tons. . . .

"Coal, upon which our age depends and for which most of the importing world looked to Britain, shows painful decline in Britain's exports. Italy's supply from this source fell from nearly 10,000,000 to less than 6,000,000; Greece lost more than three-fourths of her supply; Egypt nearly as much; Argentina went from over 3,500,000 tons to less than 750,000. . . ."

<sup>1</sup>

What Do These Tables of the Amount of Coal Mined and Exported  
Show About the Changes the War Brought About In the  
Industries of the United Kingdom?

COAL MINED AND EXPORTED, 1913-1922

YEAR	Coal Mined Tons	Coal and Coke Exported Tons
1913	287,430,000	76,688,000
1916	256,348,000	41,158,000
1917	248,499,000	37,801,000
1918	227,749,000	34,174,000
1919	229,780,000	38,467,000
1920	229,532,000	28,863,000
1921	163,251,000	26,247,000
1922	250,808,000	67,939,000

What Does this Table of Iron Ore Produced and Imported, 1913-1921, Show  
About the Same Thing?

YEAR	Iron Ore Produced Tons	Iron Ore Imported Tons
1913	15,997,000	7,442,000
1916	13,495,000	6,934,000
1917	14,846,000	6,190,000
1918	14,613,000	6,582,000
1919	12,254,000	5,201,000
1920	12,707,000	6,500,000
1921	3,478,000	1,888,000 <sup>2</sup>

We have seen that coal and iron lie at the basis of the industrial system.

When there is a marked decrease in the production and use of coal and iron, such as these tables show, something is wrong.

World industry and trade have broken down, and the United Kingdom which is so closely connected with the rest of the world has suffered as a consequence.

Do you think it is true that:

THE MORE A NATION BECOMES INDUSTRIALIZED THE  
LESS IT CAN LIVE TO ITSELF, AND THE MORE IT IS AF-  
FECTED BY CHANGES IN OTHER PARTS OF THE WORLD?

Give your reasons for or against this statement.

<sup>1</sup> Ibid, pp. 76-77.

<sup>2</sup> The *Statesman's Yearbook*, Macmillan & Company, London, 1923.

## TEST FOR SECTION VI

I. England is now master of about:  $\frac{1}{100}$ ,  $\frac{1}{10}$ ,  $\frac{1}{4}$ ,  $\frac{1}{2}$ ,  $\frac{9}{10}$  of the territory of the world. (Underscore the most accurate answer.)

II. On the time line mark off by a bracket the period of fifty years in which England secured the greater part of the empire she possesses today.



III. The Industrial Revolution was going on at the very time that England was building her empire. Does this fact prove that the Industrial Revolution was a cause of the growth of the empire? Tell why?

IV. England holds \_\_\_\_\_ and \_\_\_\_\_, the two mouths of the Mediterranean Sea.

V. England keeps control of Egypt and the Soudan because: (Check the four best reasons.)

1. They are her colonies.
2. They are located on her route to India.
3. Her leaders enjoy being masters of other peoples.
4. She dare not lose the Suez Canal.
5. Coal and iron can be had for England's factories.
6. The people there buy English manufactured goods.
7. Agricultural products are sold to England.

VI. *First:* Write on a blank sheet of paper three arguments which you think would justify England in taking Rhodesia.

*Second:* Write three arguments to prove that England did wrong.

*Third:* If you think that the way England took Rhodesia was wrong write a plan by which England could have done it so that every one would have received fair treatment.

VII. The Mediterranean region is important to England because: (Check the best reasons.)

1. The Mediterranean is not so rough as the Atlantic.
2. England's merchants can sell goods there.
3. England and France have been Allies.
4. Coaling stations are needed for British ships.
5. England wants Mesopotamia's oil.
6. Italy is located there.
7. It is the shortest route to India.
8. Morocco is controlled by France.
9. Important supplies of coal and iron found there are controlled by England.

VIII. List B gives reasons why England wants to keep the colonies named in List A. Some of the reasons apply to one colony; other reasons



or perhaps the same ones apply to another. After the name of each colony, Canada, Australia, etc., unite the numbers of the *two best* reasons that apply to that particular colony.

LIST A.		LIST B.
Canada	Nos.-----	1. has great coal deposits.
Australia	Nos.-----	2. buys manufactured good.
India	Nos.-----	3. produces much rubber.
Egypt	Nos.-----	4. exports immense quantities of food.
South Africa	Nos.-----	5. has important iron deposits.
		6. protects the trade routes to the far East.
		7. supplies England with cotton.
		8. has a huge population.
		9. is a manufacturing country.

IX. In this list there are four statements that, when arranged in the correct order, tell the chief steps in the way the British Empire grew. Decide which four statements do this and write their numbers in the proper order below.

You will need to be very careful to get the best four statements. Many of those in the list are true but only four can be arranged in order to tell the story of why the **empire grew**.

1. England needed to bring coal from abroad.
2. England forcibly took control of India, South Africa and other colonies.
3. England invented machines earlier than other countries.
4. England became a great manufacturer and depended on other countries for food.
5. England's craftsmen hated the new machines.
6. England's people had a democratic government.
7. England was a great sheep-raising country.
8. Englishmen were fair in sport.
9. England built many ships and traded with the whole world.
10. England was a market for manufactured goods.
11. England needed raw materials and a place to sell her goods.

#### BOOKS FROM WHICH YOU CAN GET ADDITIONAL INFORMATION ON THE MODERN BRITISH EMPIRE

- Allen, Nellie B.: *Asia*. Ginn and Company, Boston, 1916, pages 276-349.
- Allen, Nellie B.: *Europe*. Ginn and Company, Boston, 1913, pages 72-98 and 18-39.
- Carpenter, Frank G.: *Africa*. American Book Company, New York, 1916, pages 81-113 and 273-322.
- Carpenter, Frank G.: *Asia*. American Book Company, New York, 1897, pages 202-248.
- Carpenter, Frank G.: *Europe*. American Book Company, New York, 1912, pages 32-84.
- Huntington, Ellsworth: *Asia*. Rand, McNally and Company, Chicago, 1912, pages 304-344.
- The Statesman's Year Book, 1922*. The Macmillan Company, New York, 1922. A one-volume reference book which covers the essential statistics and facts on industry, population, commerce, etc., of every country in the world. This book and *The World Almanac* should be available for reference.
- Smith, J. Russell: *Commerce and Industry*. Henry Holt and Company, New York, 1916, pages 351-365, 460-467, 484-500, and 531-554.
- The World Almanac and Encyclopedia for 1924*. Press Publishing Company, New York World, 1924. A small one-volume encyclopedia. It contains statistical and factual information about political, economic and social matters. An excellent and cheap reference book for the class.

## MAGAZINE REFERENCES ON THE BRITISH EMPIRE

- What Great Britain is Doing: *National Geographic*, March, 1917, Vol. 31, pages 193-210.
- Through the Heart of Hindustan: *National Geographic*, November, 1921, Vol. 40, pages 432-467.
- The Marble Dams of Rajputana: *National Geographic*, November, 1921, Vol. 40, pages 469-499.
- Outwitting the Water Demons of Kashmir: *National Geographic*, November, 1921, Vol. 40, pages 499-512.
- A Pilgrimage to Amernath, Himalayan Shrine of the Hindu Faith: *National Geographic*, November, 1921, Vol. 40, pages 513-542.
- Nepol: A Little-Known Kingdom: *National Geographic*, October, 1920, Vol. 38, pages 245-283.
- Hunting the Chaulmoogra Tree (Burma): *National Geographic*, March, 1922, Vol. 41, pages 243-276.
- Among the Hill Tribes of Burma, An Ethnological Thicket: *National Geographic*, March, 1922, Vol. 41, pages 293-321.
- Antioch the Glorious: *National Geographic*, August, 1920, Vol. 38, pages 81-103.
- The Rise of the New Arab Nation: *National Geographic*, Vol. 36, November, 1919, pages 368-393.
- Modern Persia and Its Capital: *National Geographic*, April, 1921, Vol. 39, pages 352-416.
- Persian Caravan Sketches: *National Geographic*, April, 1921, Vol. 39, pages 417-468.
- Modern Scenes in the Cradle of Civilization (Mesopotamia): *National Geographic*, April, 1922, Vol. 41, pages 390-407.
- Mauru, The Richest Island in the South Seas: *National Geographic*, December, 1921, Vol. 40, pages 559-589.
- Sarawak, The Land of the White Rajahs: *National Geographic*, December, 1919, Vol. 35, pages 110-167.
- Kaieteur and Roraima (British Guiana): *National Geographic*, September, 1920, Vol. 38, pages 227-244.
- The Charm of Cape Breton Island: *National Geographic*, July, 1920, Vol. 38, page 34.
- Life on the Grand Banks: *National Geographic*, July, 1921, Vol. 40, pages 1-28.
- Malta, The Halting Place of Nations: *National Geographic*, May, 1920, Vol. 37, pages 445-478.
- The Orkneys and Shetlands, A Mysterious Group of Islands: *National Geographic*, February, 1921, Vol. 39, page 197.
- The Channel Islands: *National Geographic*, August, 1920, Vol. 38, pages 143-164.
- The Islands of Bermuda: *National Geographic*, January, 1922, Vol. 41, pages 1-26.
- Through the Heart of England in a Canadian Canoe: *National Geographic*, May, 1922, Vol. 41, page 473.

## SECTION VII

### FRANCE—THE SECOND EMPIRE IN THE WORLD HER FAVORABLE LOCATION FOR TRADE



"The French Republic! What do you mean—republic? France is an empire. In fact it is the second greatest empire on earth. It actually reaches around the world!"

The speaker dropped his chair down with a thud as if to emphasize the point he was making and mopped the streaming perspiration from a hot pudgy face.

Dinner was over in the Paola House, and several traveling salesmen were cooling off in the rustic chairs on the sidewalk in front of the hotel. The argument which had started over England's trade long before the evening meal had spun out through various courses and now was being continued in the dusk of approaching evening.

"Why, certainly you must be wrong," murmured a more retiring member of the group; "certainly France is a republic. She elects a president just as we do in the United States. What about her Chamber of Deputies and her Senate?"

"Oh, of course, France is *called* a republic. That's right; she has a president and her government is like a republic. But we ought to speak of the French Empire instead of the Republic of France just the same!"

"How do you make that out?" came a query in the midst of several objections from the group.





"What I can't see though, is why she wants it," interrupted a typical commercial "drummer." "She's got to keep an army to maintain order and it certainly costs lots of money to govern each of those possessions."

---

ARE YOU WONDERING, TOO, BY THIS TIME ABOUT  
THIS HUGE FRENCH EMPIRE?

Are you wondering what happened to France while England was changing from a little country of manors to a huge industrial empire totaling nearly one-fourth of the people of the world?

Have you been curious to know who these French people are that we helped in the great World War? The stories of the next three sections will tell you something about them.

There are some important facts to learn about  
France and her Empire.

THE FIRST PROBLEM: TO SHOW HOW SMALL FRANCE  
IS COMPARED TO THE COLONIES OF WHICH  
SHE IS MASTER

EXERCISE TO HELP YOU TO FIND OUT

1. Lay a thin sheet of paper over a wall-map of the world and trace the boundaries of France herself.
2. Cut out the area enclosed.
3. On another sheet of paper trace the boundaries of all her possessions as shown on Fig. 69.
4. Cut these areas out and paste them together so that they form one fairly continuous area.
5. Lay the tracing of France on that of her colonies. Estimate the number of times the area of France could be included in that of her colonies. Each pupil in your class should do this.
6. On the blackboard make a table of the answers received. What is your conclusion now? How many times larger than France is the area of her colonies?

TO MAKE THE COMPARISON ACCURATE LOOK UP THE EXACT AREAS  
IN THE APPENDIX TO THIS PAMPHLET. HOW NEARLY  
CORRECT WAS YOUR ESTIMATE?

**YOUR SECOND PROBLEM: TO FIND OUT HOW MANY PEOPLE  
LIVE IN FRANCE AND IN PARTS OF HER EMPIRE**

Look up in the Appendix the following facts:

1. The population of France.....
2. The population in her empire.....

Make a bar graph to show how the two compare in size.

**YOUR THIRD PROBLEM: IS FRANCE AS THICKLY POPULATED  
AS ENGLAND? AS THE UNITED STATES?**

From the Appendix fill in the blanks of this table:

1. Population of United States.	2. Area of United States in square miles.	3. No. of people living in United States per square mile.
1. Population of England.	2. Area of England.	3. No. of people living in England per square mile.
1. Population of France.	2. Area of France.	3. No. of people living in France per square mile.

Which is the most congested, the United States,  
England, or France?

**YOUR FOURTH PROBLEM: HOW FAVORABLY IS FRANCE  
LOCATED IN ORDER THAT TRADE MIGHT GROW UP?**

We have found out that countries that are well located in regard to the seas and oceans tend to become great traders.

We learned that England grew to be a manufacturing nation partly because she was so conveniently located to trade by seas with the rest of the world. We found that since no part of England was far from the sea and since she had a rough coast line and many harbors, she developed a great trade. This in turn was one of the chief reasons why England became one of the world's greatest manufacturers.

What about France?

First turn back to Fig. 50 in Section V, the trade map of the world.

From this map does it appear to you that the merchant ships of the world sail near the shores of France?

(1) On a wall-map of the world find on it the following bodies of water which surround France: The English Channel, the Atlantic Ocean, the Bay of Biscay, the Mediterranean Sea.

(2) Find France's chief ports: Havre, Nantes, Bordeaux, and Marseilles.

Turn back to Fig. 50 the trade map of the world. Do you find each of these bodies of water?

Can you see how part of the trade of the world turns off the main line and goes in and out of France's harbors?

What is your conclusion now: Is France favorably located to trade easily with other parts of the world?

Notice on the map of Europe what a convenient settling place France has been in the past centuries. The British Islands were cut off, of course, for it was hard to get across the sea. The huge peninsula, which is now Spain and Portugal, is away around the corner, so to speak, and from the opposite side on the Mediterranean the northern coast of Africa extends. Curiously enough, although France has been for a long time a very unified people—less than 1 per cent of the population of France was foreign born—the French people today are made up from original stock that came from more different people than any other country in Europe.

What a fine position she has been in all these centuries! "She commanded western Europe; she held the channel against England; she had a great Atlantic seaboard; she spread out on the Mediterranean; she touched southeastern Europe by the passages of the Alps; she held the only routes east and west of the Pyrennes and Spain. *Geographically France is the most favored country in Europe.*"

---

### THREE REASONS WHY EUROPE ITSELF IS THE GREATEST TRADING CONTINENT: ITS LOCATION, ITS SIZE, AND ITS ROUGH COAST LINE WITH MANY HARBORS

From the same trade map of the world, Fig. 50, you can see that the trade of the world goes to and from Europe. All the lands on the map radiate from Europe, especially the northwestern part.

One reason—that is, her favorable location—has already been made clear.

The second one, perhaps you may be astonished to hear, is her size and shape.

#### EUROPE IS THE SMALLEST OF THE CONTINENTS

“Why Europe is really only a peninsula of Asia, isn't it?”

Do you agree with the exclamation of one seventh grade pupil? Study your wall-map of the world, carefully to make up your mind about the matter. Do you see how small Europe is compared to Asia and Africa, North and South America?

Remember that all Europe is only a bit larger than the United States herself!

Now many people have insisted that we should not speak of Europe as a “continent.” They want us to regard Europe and Asia as one continuous continent. In fact they say that Europe is only a peninsula “stuck on the left side of Asia.” They call the whole “the *continent of Eurasia*.”

Does the world map make this statement seem at all true?

Try to find on the wall-map where Europe leaves off and Asia begins.

Can you find the dividing line?

It is very difficult to know where to draw it, is it not?

The Ural Mountains Form one convenient dividing line  
between Europe and Asia

Do you find the Ural mountains? A long thin barrier running almost north and south from the Kara Sea down toward the Caspian Sea?

#### MAP EXERCISE

1. On a blank map of the world, sketch in the Ural Mountains. Letter them “*Ural Mountains*.”

2. Letter the name *Caspian Sea* in the proper place.

3. From a study of the wall-map draw a heavy boundary line between Europe and Asia. It runs north from the Caspian Sea, winding along west of the *Ural River*, then slightly east of the *Ural Mountains*, until it connects the *Kara Sea* on the very north. In doing this pay especial attention to three natural lines on the earth: first the Ural River on the south; second, the Ural Mountains; third, the Kara Sea.

4. Letter this line you have drawn: “Boundary line between Europe and Asia.”



WHAT ABOUT DISTANCES FROM INTERIOR REGIONS  
TO THE COAST?

Are interior points of Europe as far from seaports as are interior  
points of Asia, Africa, North and South America

In order that the people of one continent can trade with people of other continents they must be able easily to transport their products to the sea.

Do you remember how short the distances of interior cities from the harbors are in England? Only a few hours' train ride at the most.

Do you remember how Manchester went to the tremendous expense of digging a great canal all the way from the sea just to be able to carry goods by water straight away from her factories?

Such illustrations show one important reason why regions near the coast, and near harbors, grow up as manufacturing and trading centers. What is the reason?

What about Europe as contrasted with Asia, Africa, North and South America? Are distances shorter or longer from interior regions to the coast?

AN EXERCISE TO FIND OUT ABOUT DISTANCES  
ON THE FIVE LARGEST CONTINENTS

1. Measure with a ruler on a wall-map of the world, the shortest route from several interior points of Europe to the sea. Take Vienna, Budapest, Prague, Warsaw, Moscow, and Kief. Look for the "scale" on the map that tells how many miles are shown for each inch. Compute the approximate number of miles. Write them in a table on the blackboard.

2. Do the same for two or three central points of Asia, of Africa, of South America.

3. Do it for the United States, taking such points as Omaha, Chicago, and Minneapolis.

Now you can answer the question: From which continent would you expect goods to be transported to other countries most economically? Why?

What about the coast line of Europe? Has Europe  
many harbors?

Are there many indentations in the coast line? Have good harbors been utilized?

Let us study a wall-map of Europe a moment to find out.

Point to each of the following port cities of Europe:

- |              |               |
|--------------|---------------|
| 1. Riga      | 4. Gothenburg |
| 2. Danzig    | 5. Bergen     |
| 3. Stockholm | 6. Hamburg    |

- |                 |                    |
|-----------------|--------------------|
| 7. Bremen       | 19. Manchester     |
| 8. Amsterdam    | 20. Lisbon         |
| 9. Rotterdam    | 21. Valencia       |
| 10. Havre       | 22. Barcelona      |
| 11. Brest       | 23. Genoa          |
| 12. Nantes      | 24. Naples         |
| 13. Bordeaux    | 25. Venice         |
| 14. Marseilles  | 26. Trieste        |
| 15. London      | 27. Fiume          |
| 16. Southampton | 28. Saloniki       |
| 17. Liverpool   | 29. Constantinople |
| 18. Bristol     | 30. Odessa         |

HOW DOES FRANCE COMPARE WITH THE REST OF EUROPE  
IN NUMBER OF GOOD HARBORS

Make a list of the foregoing ports so as to show how many ports each of the following countries has:

(1) France; (2) Germany; (3) Czecho-Slovakia; (4) Austria; (5) Switzerland; (6) Russia; (7) Spain; (8) Portugal; (9) England; (10) Italy; (11) Jugo-Slavia; (12) Greece; (13) Turkey; (14) Sweden; (15) Norway.

Study the wall-map also to answer the question: How does France compare with these other European countries in these four respects?

1. Length of coast line
2. Unevenness of coast line
3. The number of bodies of water which touch her shores.
4. The ease with which ships leaving her ports can follow the chief trade routes of the world. (Use the map of trade routes, Fig. 50.)

MAP EXERCISE

1. On an outline map letter in the proper position the ports of Europe that are named in the foregoing list.

2. Exchange maps with a neighbor. Correct his map, writing on the margin the name of each body of water or port incorrectly located. Return your neighbor's map and receive your own.

3. Learn the location of each port you missed. Try to follow these steps:

*First:* Compare your work with the correct location on a geography map. Note exactly wherein your work is wrong.

*Second:* Close your eyes and try to see in your mind a correct picture of each location that you missed.

*Third:* Study the geography map again to see if the picture in your mind was correct.

*Fourth:* If not, study the map carefully then close your eyes and try this process until you can picture correctly each location that you missed.

*Fifth:* On a clean map repeat the test, exchanging papers again with your neighbor correcting his test and having him correct yours.

---

There are other advantages which come to a land near the ocean beside the advantage of being able to develop a world trade. Later we shall find out what these advantages are.

---

THE LOCATION OF EUROPE AS A WHOLE AND OF FRANCE  
PARTICULARLY INFLUENCED THEIR INDUSTRIAL  
DEVELOPMENT

It is believed that the location of Europe, its size, and its uneven coast line, is largely responsible for the fact that the industrial revolution occurred first in Europe.

And in these respects France is one of the most advantageously located countries of Europe for the development of a trading and industrial civilization.

MAP EXERCISE

1. On an outline map of France show (a) the following mountain ranges: The Alps, the Pyrennes. (b) the following rivers: the Seine, the Loire, the Garonne, the Rhone.

2. Exchange maps with a neighbor. Correct his map, writing on the margin the name of each river or mountain range incorrectly located. Return your neighbor's map and receive your own.

3. Learn the location of each river or mountain range which you missed. Try to follow these steps:

*First:* Compare your work with the correct location on a geography map. Note exactly wherein your work is wrong.

- Second:* Close your eyes and try to see in your mind a correct picture of each location that you missed.
- Third:* Study the geography map again to see if the picture in your mind was correct.
- Fourth:* If not, study the map carefully then close your eyes and try this process until you can picture correctly each location that you missed.
- Fifth:* On a clean map repeat the test, exchanging papers again with your neighbor correcting his test and having him correct yours.

Now that we have seen something of France and her relation to the rest of the world, let us follow her development from the time of the Middle Ages.

Did she develop in the same way and at the same time that England developed?

How was she like and how different from the little island country?



## SECTION VIII

### HOW FRANCE BECAME BOTH FARMER AND MANUFACTURER, 1750-1850

FRANCE IN 1750 WAS IN MANY WAYS LIKE THE  
FRANCE OF THE MIDDLE AGES

We have seen that by 1750 England had not changed greatly from the England of 1400, 1500, or 1600.

France, too, was not very different from the France of the Middle Ages.

"If some Rip Van Winkle of the sixteenth century could have slept for two centuries to awake in 1750, he would have found much less to marvel at in the common life of the people than would one of us. Much of the farming and even of the weaving, buying, and selling, was done just as it had been done centuries before and the great changes that were to revolutionize the life and work of the people were as yet hardly dreamed of. . .

"One might still see the countless little agricultural villages and manor houses nestling among the hills or dotting the plains, surrounded by green fields and fringed with forest or waste land. The simple villagers still cultivated their strips in the common fields in the time honored way, working hard for meager returns. A third of the land stood idle every year; it often took a whole day merely to scratch the surface of a single acre with the rude wooden plow then in use; cattle were killed off in the autumn for want of good hay; fertilizers were only crudely applied, if at all; many a humble peasant was content if his bushel of seed brought him three bushels of grain, and was proud if his fatted ox weighed over four hundred pounds, though a modern farmer would grumble at results three or four times as good."<sup>1</sup>

SERFDOM HAD DISAPPEARED IN FRANCE, BUT THE PEASANTS  
WERE VERY POOR

The peasants of France, like the peasants of England, were no longer real serfs in 1750. They were not tied to the land; they could not be sold to fight in other lands, as serfs in other parts of Europe could be. They could not be forced to marry if they did not wish.

---

<sup>1</sup> Hayes, Carlton J.: *A Political and Social History of Modern Europe*, The Macmillan Company, New York, 1920; Vol. I; p. 395.

The condition of the peasants in France during these years was so much better than that of peasants in other parts of Europe that a traveller journeying through the country districts of France in 1789 wrote of "little parties sitting at their doors; some of the men smoking, some playing cards in the open air and others spinning cotton. Everything we see bears the mark of industry and all the people look happy."

Still life was very hard for the peasants of France. Particularly hard were the taxes which they must pay to the lord, to the church, and to the king.

A famous writer has estimated that the French peasants paid four-fifths of their income in taxes—in rent and other dues to the lord on whose land he lived, in the money which they had to give to the church, in the income, salt, and other taxes which they had to pay to the king's tax gatherers.

Probably the peasants did not have to pay so much as this writer believed, but the amount was nevertheless very large.

"All these burdens—dues to the lord, tithes to the church, taxes to the king—left the peasant but little for himself. . . In a few favored districts . . . farmers were able to pay their taxes and still live comfortably. But elsewhere the misery of the people was such as can hardly be imagined. With the best of harvests they could barely provide for their families, and a dry summer or long winter would bring them to want. There was only the coarsest of bread—and little of that; meat was a luxury; and delicacies were for the rich. We read how starving peasants in France tried to appease their hunger with roots and herbs, and in hard times succumbed by thousands to famine. One-roomed mud huts with leaky, thatched roofs, bare and windowless, were good enough dwellings for these tillers of the soil. In the dark corners of the dirt floors lurked germs of pestilence and death. Fuel was expensive, and the bitter winter nights must have found many a peasant shivering supperless on his bed of straw."<sup>1</sup>

IN THE MEANTIME TOWNS HAD BEEN GROWING, INDUSTRIES  
DEVELOPING, AND TRADE INCREASING

When we studied the Middle Ages we found the old manorial agricultural system breaking down and we saw that towns, industries, and trade had been growing rapidly.

By the year 1787 about 500,000 people lived in Paris. Is it not astonishing to think of a city there of a half million people as long ago as that? Other towns as well were growing up.

"The towns had begun to lose some of their medieval characteristics. They had spread out beyond their cramping walls; roomy streets and pleasant squares made the newer sections more attractive. The old fortifications,

---

<sup>1</sup> Ibid; p. 398.

no longer needed for protection, served now as promenades, city thoroughfares were kept cleaner, sometimes paved with cobbles; and at night the feeble but cheerful glow of oil street lamps lessened the terrors of the belated burgher who had been at the theater or listened to protracted debates of the great town hall.

"The life of the town was nourished by industry and commerce. Industry in the eighteenth century (1700s) meant far more than baking bread, making clothes, cobbling shoes, and fashioning furniture for use in the town; it meant the production on a large scale of goods to sell in distant places—cloth, clocks, shoes, beads, dishes, hats, buttons, and what not. . . .

"In order that French dyers might acquire a reputation for thorough work, the king issued over three hundred articles of instruction for the better conduct of dyeing business. In an age when unscrupulous English merchants were hurting the market with poorly woven fabrics, French weavers were given careful orders about the quality of the thread, the breadth of the cloth, and the fineness of the weave. It is said that in 1787 the regulations for French manufactures filled eight volumes.

"The trade of the 1700s between the Americas, Europe, and Asia was very large. The New World gave furs, timber, tobacco, cotton, rice, sugar, rum, molasses, coffee, dyes, gold, and silver, in return for negro slaves, manufactures and oriental wares; and the broad Atlantic highways were traversed by many hundreds of heavily laden ships."<sup>1</sup>

#### TWO CLASSES OF PEOPLE WERE GROWING UP WITH THE GROWTH OF TOWNS—THE MIDDLE CLASSES AND THE WORKERS

Now with all this trade and industry there had grown up in the towns a wealthy middle class, composed of merchants, rich shopkeepers, bankers, and lawyers. The middle class was often called the *bourgeoisie* because it lived in towns, or *bourgs*. These men carried on the trade and industry of the country.

Of course there were also the working men in the towns—not such a large number as there were later after the great industrial changes had taken place in France. Still, there were many town workers. And they, like the peasants, lived for the most part, a life of cold, hunger, and poverty.

#### The ignoble and the noble

These three classes—the peasants, the town workers, and the bourgeoisie, belonged to what was called in France the Third Estate, the ignoble lower classes. They were heavily taxed. The peasants and the workers had nothing to say in the government and the bourgeoisie very little.

---

<sup>1</sup> Ibid; pp. 339-401.



The privileged, important classes in society were the clergy and the nobility—called the first and second estates.

Now the members of these two classes, the privileged classes, formed a very small part of the total population of France, about 280,000 out of the 25,000,000 people who lived in the country—or one out of a hundred of the population. The other ninety-nine belonged to the ignoble classes.

"This small upper class was distinguished from the common herd by rank, possessions, and privileges. The person of noble birth, that is, the son of a noble, was esteemed to be . . . finer and better than other men; so much so that he would disdain to marry a person of the lower class. He was addressed in terms of respect—'my lord,' 'your grace'; common men saluted him as their superior. His clothes were more gorgeous than those of the plain people; on his breast glittered the badges of honorary societies, and his coach was proudly decorated with an ancestral coat of arms. His 'gentle' birth admitted him to the polite society of the court, and enabled him to preferment in church or army.

"... Each noble bequeathed to his eldest son a castle or a mansion with more or less territory from which to collect rents or feudal dues. Bishops, abbots, and archbishops, princes of the church . . . often enjoyed during their lifetime magnificent possessions . . . castles, cathedrals, palaces, rich vestments, invaluable pictures, golden chalices, rentals from broad lands, tithes from the people,—these were the property of the clergy. It was estimated that the clergy and nobility each owned one-fifth of France. . . .

"The noble families, possessing thousands of acres . . . were further enriched, especially in France, by presents of money from the king . . . and by high salaried positions which entailed little or no work. 'One young man was given a salary of \$3,600 for an office whose sole duty consisted in signing his name twice a year.

"With all their wealth the first two orders contributed almost nothing to lighten the financial burdens of state. The Church of France claimed exemption from taxation, but made annual gifts to the king. The nobles, too, considered the payment of taxes a disgrace to their gentle book, and did not hesitate to evade, . . . taxation, leaving the chief burdens to fall upon the lower classes, and most of all upon the peasantry."<sup>1</sup>

The privileged classes lived in great splendor, enjoying all manner of luxuries in their great castles or at the gorgeous court of the king at Versailles.

Now by the beginning of the eighteenth century (1700s) the lower orders were becoming more and more dissatisfied. They began to wonder why they should bear all the burdens, and why the king and nobles and clergy should have all the pleasures.

<sup>1</sup> Ibid; pp. 403-405.



They murmured against this order of things.

Louis XV, who ruled from 1715-1775, "knew that trouble was brewing. He grew afraid to ride openly among the discontented crowds of Paris; the peasants saluted him sullenly; the treasury was empty; the monarchy was tottering. Yet Louis XV felt neither responsibility nor care.

" 'It will surely last as long as I,' he cynically affirmed; 'my successor may take care of himself.' "

And of the wife, Marie Antoinette, of the king who followed Louis XV this story is told. Some one said to her one day,

"The people have no bread."

And the queen answered, "Then why don't they eat cake?"

You can see, then, why the mutterings of the people ended in The Revolution which began in 1789. The bourgeoisie, the peasants, and the town workers fought against the king, the nobles, and the clergy.

The king and the privileged orders lost in this conflict. Many of them even lost their heads!

Thus it was that the middle classes, the Bourgeoisie, came into power in France.

The peasants and the town workers got less from the victory which they had helped to win than you might expect.

#### THE PEASANTS OF FRANCE HAVE OWNED THEIR LITTLE FARMS SINCE THE REVOLUTION

The peasants did get one thing. The land was divided up, and from this time on we find the French peasants living each on his own little bit of land and often owning it. You will see how this fact has influenced France since the Revolution.

The town workers, however, were left pretty much in the cold. Their position was not so very different from what it had been before.

#### BUT IN THE MEANTIME FRANCE HAD BUILT UP A GREAT EMPIRE AND WAS LOSING IT TO ENGLAND

We have seen that trade developed during these years in England and that this little island country gained a number of colonies in the new world, in India, in Australia, even before 1800.

France also during the 1500s, 1600s, and 1700s, was extending and increasing her trade and building up colonies in North America and in India.

Thus France and England came into conflict with each other. Neither wanted the other to build up a great empire and to gain the trade of the far parts of the world. During the 1700s and up until 1815, the two countries carried on warfare in Europe, on the seas, and in the colonies.

And England won.

In 1815 France under Napoleon was badly defeated, and this defeat marked the end of a great period in French history. For France, the country which had at one time been the center of the greatest empire in the world, had now fallen below England and the United States in importance.

Thus was France drained by the long wars and the Revolution; her colonies were gone; she was no longer a world power.

#### WHAT KIND OF A COUNTRY WAS FRANCE IN THOSE DAYS AFTER HER DEFEAT?

In 1815, she was an agricultural country, a country of green fields, of orchards, of vineyards.

From the English Channel to the Alps and the Mediterranean, from the Belgian border to the Pyrenees, France was a country of farms.

These farms were very different from the farms in England, for there the land was owned by great landlords, and the people who worked on the land were hired by the landlords to work on their great estates.

In France, since the Revolution particularly, the farms of France were small plots of land, each cultivated by a hard working peasant family. Many of the peasants owned their farms, others rented the land, but there were very few great estates farmed by a large number of hired laborers.

In 1865 about *half the people* who worked on the land in France owned it. In England only *one person in 62* owned the land on which he worked.

These figures show the striking difference between the two countries.

In the northern part of France, and in the east, many of the fields of wheat and rye and barley were still unfenced and laid out in strips like the manor fields of the Middle Ages.

In the central and most of the southern regions of France the fields were enclosed with fences or hedges as the farms of England were after the enclosures.

In the valleys of the Pyrenees, for example, these were "many small properties with every appearance of rural happiness. . . The country mostly enclosed, and much of it with thorn hedges, admirably trained, and kept neatly clipped."

In the south there were fields of wheat and gardens and orchards where fruits of all kinds, particularly grapes, were grown.

Even though France was poor as a result of war and revolutions, though her Empire had been taken away and though she had fallen behind in trade—still the country was beautiful, and rich in the products of the earth.

THE PEASANTS OF THE EARLY 1800s FARMED IN MUCH  
THE SAME WAY THAT THEIR ANCESTORS HAD  
FARMED FOR HUNDREDS OF YEARS

"There was little change in the implements with which the peasant worked during those years. He clung to his hoe, his long shafted spade, and the short scythe. . . . In some districts his plows, harrows, and carts were slowly improving, metal replacing wood, and wheeled plows the wheelless sorts. (The wheel plough, it should be added, was known before 1789.) The smallness of the farms was all against trying out new kinds of expensive implements; and the peasant had faith in the skill of his own hands. The hoe and the spade had accomplished a great deal in Flanders [northern France]. From 1820 or 1830 onwards, the simple kinds of threshing machinery available at that date began to spread in the north, the flail giving way before them. Even small cultivators took to using them in some districts, and latterly they made rapid progress. But the south went its old way with wooden wheeled ox-carts, the flail, the open-air threshing floor and very often with the simplest of plows."<sup>1</sup>

GRADUALLY FRENCH AGRICULTURE IMPROVED. THE AMOUNT  
OF FARM PRODUCTS INCREASED, AND NEW CROPS  
WERE INTRODUCED

The methods of farming were old fashioned. They were not like the methods used today on a modern American farm. But the amount of goods produced on the little farm of France was gradually increasing, as these figures show:

Year	Million Bushels of Wheat Grown	Million Gallons of Wine Made
1789	93	374
1848	152	925

The potato became one of the chief crops of France

Potatoes were raised very little in France before 1800. But within a few years, they became one of the most important crops in the country.

"From the mountainous parts of Provence . . . it was reported (1812-1814) that potatoes being recognized as an article of prime necessity for the nourishment of all kinds of beasts and for that of man, especially in seasons of dear corn, their cultivation is carried on with the utmost care. In another hilly district of the south, the Department of the Tarn, the

<sup>1</sup> Adapted from Clapham, J. H.: *The Economic Development of France and Germany, 1815-1914*, Cambridge University Press, London, 1921; p. 26.

potato, though only introduced a few years ago, has made and is still making great progress. The population of mountain cantons lives on nothing but potatoes and chestnuts for six months in the year, a poor diet, but at least better than chestnuts only.”<sup>1</sup>

The potato is called the poor man's food. The peasants of France were often poor, and they found the potato valuable for filling hungry stomachs.

Very rapidly did potato growing increase.

In 1789 only five million bushels of potatoes were raised, in 1848,  
275 million bushels

How many times as many bushels were raised in 1848 as in 1789, only fifty-nine years later?

Sugar beets were introduced into France  
early in the 1800s

Europe before 1800 had used sugar made from the sugar cane grown in southern regions.

However, it was found that sugar could also be made from the sugar beet which is grown in northern regions like France.

Napoleon introduced the sugar beet into his country early in the century, when he was ruling France.

“England mocked this sugar substitute and her caricaturists drew pictures of Napoleon's infant heir chewing a beet root unhappily while the nurses said, ‘Suck, dear, suck; your father says it's sugar.’”

The English were mistaken when they mocked the French sugar beet. For beet sugar came to be used more and more, and the sugar beet came to be one of the chief agricultural products of France.

It was found that it was particularly successful in the northern part of the country. Before 1850, over 50,000 tons of refined sugar were being produced every year in France.

France also became a sheep raising country

Between the years 1775 and 1825 Spanish merino sheep were introduced into France. Sheep raising became an important industry, and the wool of the sheep on the hills of France was used to feed French looms.

---

<sup>1</sup> Clapham, J. H.: *The Economic Development of France and Germany, 1815-1914*, Cambridge University Press, London, 1921; p. 23.



SUCH WAS THE AGRICULTURE OF FRANCE DURING THE  
FIRST FIFTY YEARS OF THE 1800s

The Methods of Farming Remained Much the Same As They  
Had Been For Hundreds of Years. French Peasants Still  
Used the Old Fashioned Plows, Harrows, Hoes, and  
Spades. But the Amount of the Chief Agricultural  
Products Raised was Increasing, and New  
Crops were Being Introduced

---

THE INDUSTRIES OF FRANCE EARLY IN THE 1800s

WE HAVE SEEN THAT THE INDUSTRIAL REVOLUTION WAS  
TRANSFORMING ENGLAND BETWEEN 1775 AND 1825.  
WAS THE SAME THING TRUE OF FRANCE?

Did France have industrial districts like those in the center of England? Were there in the hillsides of France, gashes from which coal was being drawn? Were there tall smokestacks and great factories? Did grey smoke fill the skies? As we have seen, these were things that were coming to pass in England from 1775 to 1825.

No, France did not become a great industrial country during the first half of the 1800s. From 1800 to 1850 very little change occurred, almost none before 1830. In 1850 the industries of France were still largely undeveloped.

Even as late as 1865, of the 37 million people living in France about 20 million made their living by agriculture.

ONE REASON FOR THE SLOW GROWTH OF INDUSTRY WAS THAT  
THE LAND HAD BEEN DIVIDED INTO SMALL FARMS, AND  
MANY PEASANTS OWNED THEIR FARMS

In England, the farmers were driven from the land by the great landowners. In France the land was divided up among the peasants, and each could live with a certain amount of comfort on his bit of land. He was not driven to the city.

A well known historian writing at the end of the century said:

"France . . . has been, throughout the greater part of the century, pre-eminently an agricultural country. It did not take up manufacturing industries, except in certain special branches, with anything like the success

of England, or, in later years, of Germany. This was partly due, no doubt, to the superior attractions held out by the culture of the vine, and by the system of peasant ownership of land, for after the Revolution the land came into the hands of the many, and no longer belonged only to the few. After the Revolution . . . the right was granted to divide land at will, so that the land became cut up into very small holdings. We are told by some authorities that the sub-division of the land has been a great aid to the progress of agriculture, and that those districts in which the division of land is most frequent are the best cultivated, the richest and most productive in the whole country.”<sup>1</sup>

The division of the land among the peasants, then, was partly responsible for the fact that France did not become an industrial country.

ANOTHER REASON THAT FRANCE REMAINED AGRICULTURAL  
WAS THE IMPOVERISHMENT OF THE COUNTRY  
BY WAR AND REVOLUTION

During the 1700s France had gone through long wars with England, and she had been defeated. She had also gone through a great revolution. She was so worn out and poor as a result of these events that she was not able to build great factories and to install the fine new machines.

FRANCE LACKED COAL! THIS WAS PERHAPS THE MOST IMPORTANT  
REASON THAT FRANCE REMAINED AN AGRICULTURAL COUNTRY  
LONG AFTER ENGLAND WAS INDUSTRIALIZED

“‘We are,’ wrote Chaptel in 1828 after more than a decade of peace, ‘far from having that profusion of machines which one sees in England . . . it is because labor is cheaper with us and because the cheapness of fuel in England enables them to employ machines everywhere with advantage.’ The second reason was the chief. The total coal resources of France as now known are inadequate, and a century ago she was neither aware of their full extent nor capable of working large parts of them.”<sup>2</sup>

You remember how important coal was in the English Industrial Revolution.

In what ways did coal bring on the changes in England which we call the Industrial Revolution?

While coal was being used more and more in England after 1700 in all France, even in 1807, there were only twenty-five coal mines. Six of these

<sup>1</sup> Adapted from Gibbins, Henry de Beltgens: *Economic and Industrial Progress of the Century*, W. & R. Chambers, London, 1903; pp. 187-8.

<sup>2</sup> Clapham, J. H.: *The Economic Development of France and Germany, 1815-1914*; Cambridge University Press, London, 1921; p. 23.

were far up in the northeastern part of France near the Belgian border. The others were in a coal field west of Lyons in the valley of the Loire River. (Look up these regions on your map.)

FOR THESE REASONS THERE WERE ALMOST NO SIGNS OF  
AN INDUSTRIAL REVOLUTION UNTIL 1830. THIS  
WAS 50 YEARS LATER THAN IN ENGLAND!

Machines were introduced from England in 1825.

England had been using machines since 1775, and steam engines were taking the place of hand power to run these machines.

But England was jealous of her inventions, and it was not until 1825 that she permitted her machines to be exported to other countries. You see, she was afraid foreign industries would rival hers.

When English machines were introduced into France in 1825 the methods of manufacture in France slowly began to change.

Coal Production Increased Somewhat, But the Poor Coal Fields  
and the Small Amount of Coal That Could Be Obtained  
From Them Continued To Hold Back  
France's Industrial Development

The coal fields of France are few and poor. The most important is in the northwest corner of the country near the border of Belgium.

But here, as elsewhere in France the coal veins are thin, and the coal not very good.

Nevertheless France slowly became more of a manufacturing nation. Gradually the production of coal increased during the first half of the century.

Year	Amount Mined
1789	250,000 tons
1830	1,800,000 tons
1857	4,500,000 tons
1860	8,000,000 tons

There is, you see, quite a jump between the amount mined in 1789 and the amount mined in 1830.

Still, the amounts are small. Compare them with the amount of coal mined in England in 1845.

FRANCE HAS A GREAT DEAL OF IRON; BUT HER LACK OF COAL  
HELD BACK THE MANUFACTURING OF STEEL

There is iron in France—a great deal of it. In Lorraine, near Briey, and up in the coal region near Belgium there are valuable iron deposits.

Look ahead to the figure showing the coal and iron deposits and the industrial regions, and see just where the iron deposits are.

During the years we are discussing, the production of iron did increase somewhat, as this table shows:

Year	Production of Pig and Bar Iron No. of Tons
1789	69,000
1810	112,000
1825	199,000
1830	266,000
1835	295,000
1840	348,000
1845	439,000
1850	416,000

### EXERCISE

#### LEARNING TO MAKE A NEW KIND OF GRAPH

(a) How many times as much iron was produced in 1810 as in 1789, in 1830 as in 1810, in 1850 as in 1830. Which twenty years shows the greatest increase?

(b) Make a graph showing the increase in iron production from 1789 to 1850.

(1) Take a piece of cross ruled paper. If you do not have cross ruled paper rule a sheet of paper with lines half an inch apart running both ways.

(2) Along the bottom of the sheet write on the up and down lines beginning at the left the dates 1790, 1795, 1800, 1805, 1810, 1815, 1820, 1825, 1830, 1835, 1840, 1845, 1850. You will not need all these dates, but we want each five year period to be represented by the same space.

(3) Along the left edge of the paper beginning with the bottom number the cross lines 0, 50, 100, 150, 200, 250, 300, 350, 400, 450. These numbers represent thousands of tons.

(4) Now you will use your table. On the 1790 line make a dot at about the right place for 69. (The amount of iron produced in 1789.) On the 1810 line make a dot at about the right place for 112, and so on for each figure given in the table.

(5) Connect all these dots with lines. You will see, then, how rapidly the production of iron increased at each period.

Look back at the figures showing the production of iron in the United Kingdom (1806-1845) and compare the amount produced in the two countries.



## IRON WAS STILL MADE IN THE OLD FASHIONED WAY

Do you remember that in England in the old days iron was smelted with charcoal, made from wood?

When did this method of smelting iron change?

Do you remember that when this change came from the use of charcoal to the use of coke for smelting iron the English produced iron much more rapidly. The use of coal was very important in the industrial revolution in England.

In France where there was little coal—this change did not take place until long after it had taken place in England.

## Charcoal and Coke Furnaces in France

In 1830 there were 379 charcoal furnaces and 29 coke furnaces

In 1839 there were 364 charcoal furnaces and 106 coke furnaces

You see the charcoal furnaces were decreasing very slowly and the coke furnaces were increasing very slowly. During the first fifty years of the 1800s most of the smelting of iron was done with charcoal.

Even as late as 1846 three-fourths of the pig iron of France came from the little charcoal furnaces located near the forests.

OTHER INDUSTRIES, PARTICULARLY THE TEXTILE INDUSTRIES,  
WERE ONLY GRADUALLY GROWING AND CHANGING

France, like England, has always been a country of spindles and looms.

France did not produce such great quantities of goods as England did, but her goods were finer and more beautiful.

France has always been the home of fine cottons, woollens, silks, and linens.

In the northeastern part of France around Lille, and in Normandy, cotton was woven into cloth. Around Lyons the silk industry centered. And all over France wool was woven into cloth. (Find Normandy, Lille, and Lyons on the wall map.)

Hand manufacturing changed only slowly to machine  
manufacturing

Even as late as 1849 much of the spinning and weaving was done in the cottages of the workers as it had been a century before in England.

There were to be true, some factories, and the number was growing. For example, in Lille, a center of the cotton industry, there was in 1801 only one cotton spinning mill which employed 90 workers. In 1810 there were 22 spinning mills in the town, each employing 60 to 70 people. Spin-

ning and weaving machines were being gradually introduced, and wherever they went the output of materials increased.

Back in the early years of the century Napoleon tried to help the development of the silk industry of Lyons by a decree that all official costumes should be made of silk.

"But neither fashion nor imperial decrees developed the capabilities of the silk manufacture one hundredth part so much as the use of the Jacquard loom, so named after its inventor, and soon employed in further improved forms, not only for silk, but for all kinds of figured tissues. There were in 1875 more than twenty thousand looms in Lyons."<sup>1</sup>

Were the textile industries becoming more important  
to France and to the world? What does the  
next table show?

In 1788 France exported 24,000,000 francs' worth  
of woollen goods

In 1865 France exported 396,000,000 francs' worth  
of woollen goods

How many times had the value of the exports of woollen cloth increased?

Between 1845 and 1849 the silk exports increased in value from 140 million francs to 182 million francs.

Steam engines which years before had been installed in the factories of England, were little used in the silk, cotton, wool, and linen factories of France until after 1840.

Even then more textile factories used water power than steam to drive their machines.

#### COAL WAS NEEDED AND FRANCE LACKED COAL

Coal again! For coal is necessary to run a steam engine. If French industries could have gotten coal easily, the changes in the textile industries would have taken place more rapidly.

In 1850 the textile industry of France had not been revolutionized as it had been in England. Much of the spinning and weaving was still done in the home of the workers. The factories of Lille and Lyons and other cities were still comparatively small. The power used in most textile factories was not steam, but water.

The industrial revolution was moving slowly in France.

---

<sup>1</sup> Gibbins, Henry de Beltgens: *Economic and Industrial Progress of the Century*, W. & R. Chambers, London, 1913, p. 198.

WHAT ABOUT TRANSPORTATION IN FRANCE? HOW WERE  
GOODS CARRIED BACK AND FORTH WITHIN THE  
COUNTRY? WHEN DID THE FRENCH BEGIN  
TO BUILD RAILWAYS?

There were, in the first place, the roads of France which had been built centuries before by the Romans. These roads had been kept up during the Middle Ages better than had the old roads of England.

Indeed, the English laughed at the French, saying that they had good roads, but no goods to carry on them.

During the rule of Napoleon in the first fifteen years of the century, new roads had been built, canals had been dug, and rivers deepened.

So goods were carried both by road and by water.

Between 1818 and 1848 many more canals were built connecting rivers, such as the canal between the Rhine and the Rhone, and between the Marne and the Rhine. (Find these rivers on the wall map.)

Between 1825 and 1830 a number of horse-drawn trains were in use in France, and by 1841 there were about 350 miles of railway of various kinds.

But it was not until 1845 that steam railways were built to any great extent. (When were steam railways built in England?)

In 1848 France had 2,000 miles of railway, and a plan for a complete system of railways centering in Paris had been made. At that time England had about \_\_\_\_\_ miles. (Look back to Section IV and find out.)  
how many?

At first—because the iron industry of France was backward—iron rails had to be imported from England. This also caused the growth of railroads to be much slower in France than in England.

Slowly but surely, however, the transportation system of France was developing.

---

WE FOUND THAT ENGLAND'S POPULATION INCREASED RAPIDLY  
WHEN THE INDUSTRIAL REVOLUTION CAME, AND THAT  
THE PROPORTION OF PEOPLE IN TOWNS AND CITIES  
GREW EVEN MORE RAPIDLY

WAS THE SAME THING TRUE OF FRANCE BEFORE 1850?

Here are figures showing the increase in population between 1801 and 1851.

Year	Population
1801	26,930,756
1821	29,871,176
1831	31,787,900
1841	33,400,864
1851	34,901,938

Look back at Section IV and see how the increase of population in France compares with that of England.

#### EXERCISE

Some one in your class might make a *bar graph* and some one a *line graph* to show the way population grew in France in these years.

Let some one do it also for England, so that you may compare the two.

#### NOR HAD THE POPULATION OF THE CITIES INCREASED SO RAPIDLY AS IN ENGLAND

"Consider the French figures and facts from 1801 to 1857 . . . France started the century with a number of large cities. Paris was second only to London. She had 580,000 inhabitants in 1801 and no rival. . . Of the other large towns, Marseilles had 111,000, Lyons 109,000, more than any English town except London at that time. Bordeaux, Rouen, and Nantes were in a group from 100,000 to 75,000. These were all old and famous cities, local capitals, leading seaports, likely to grow steadily even though they did not go in for manufacturing. In the next fifty years (1801-1851) while the total French population grew about thirty per cent, that of Paris nearly doubled. Marseilles grew seventy-five per cent; Toulouse rather more. Neither Rouen nor Nantes grew so quickly as the general population; Bordeaux and Lille very little quicker. In all France only a couple of towns grew really fast in the half century as the direct result of industrial development—St. Etienne from 16,000 to 56,000 and Roubaix from 8,000 to 34,000. *Contrast England. In the single decade 1821-31, Sheffield, Birmingham, Manchester, Liverpool, Leeds, and Bradford all grew more than forty per cent.*"<sup>1</sup>

This table shows how slowly people moved  
from farms to cities

	Per cent of Population On Farms	Per cent of Population in Towns and Cities Over 2,000
1801	79.5	20.5
1851	74.5	25.5

Not a very great change during fifty years.

<sup>1</sup> Adapted from Clapham, J. H.: *The Economic Development of France and Germany, 1815-1914*, Cambridge University Press, London, 1921; pp. 53-4.



WAS FRANCE COMING TO DEPEND MORE AND MORE ON THE  
OUTSIDE WORLD AS ENGLAND DID DURING THE  
INDUSTRIAL REVOLUTION?

Yes, France was carrying on an increased trade with the outside world. But her trade was rather different from England's. England had already become so much of an industrial country that she had to import a great amount of coal.

France, on the other hand, was still chiefly an agricultural country. Therefore she *imported* iron, machinery, hardware and coal from England, and *exported* butter, poultry, fruits, and vegetables to England.

However, France was not entirely an agricultural country. She was developing certain industries, chiefly those for manufacturing fine cloth, and those for making luxuries, such as furniture, clocks, perfumes.

Therefore, she *imported* cotton from the United States, and *exported* fine wool, cotton, and silk materials, furniture, clocks, and porcelain to other countries.

What does the next table tell you of the extent to which France was becoming dependent on the outside world?

Year	Tons of goods imported from other countries
1820	690,000
1845	2,300,000

How many times as much goods was she importing in 1845 as in 1820? Remember only 25 years had elapsed. The very 25 years, however, in which France was turning more and more to manufacturing.

Do you see then, that between 1800 and 1850, France was largely an agricultural country? Nevertheless she was beginning to develop industrially, and she was increasing her trade with the outside world.

EXERCISE

Make two lists, one of ways in which France's industrial development was like that of England, and one of ways in which it was different.

TEST FOR SECTION VIII

I. Check each item in the following list which could be used to tell how people lived in France from 1800 to 1825.

1. Smoking chimneys of factories.
2. The farmers depended on the cities for manufactured goods.
3. An agricultural country of vineyards and green fields.
4. Tractors and threshing machines.
5. Wooden wheeled ox-carts.
6. The country was rapidly being industrialized.



## VIII. The bourgeoisie were: (Check.)

1. Rich farmers.
2. Merchants of the cities.
3. Officials of the army.
4. Peasants.
5. Mechanics.
6. Well-to-do city people.
7. Government executives.
8. Owners of great estates.
9. Officials of the church.
10. The middle-class.

IX. Write the most important reason you can think of why population in France from 1800 to 1850 grew as rapidly as it did.

-----

-----

-----

BOOKS FROM WHICH YOU CAN GET ADDITIONAL INFORMATION  
ON THE DEVELOPMENT OF FRANCE, 1750 TO 1850

- Osgood, Ellen L.: *A History of Industry*, Ginn and Company, Boston, 1921.  
*France, 1770-1814*; pages 305-306.  
*France, 1815-1924*; pages 306-308.
- Robinson, J. H. and Beard, C. A.: *The Development of Modern Europe*, Ginn and Company, Boston, 1908.  
*Industrial Revolution in France*, Vol. 2, pages 49-52.  
*Loss of colonies to England—India*, Vol. 1 pages 91-100. *America*, Vol. 1, pages 107-116.

Stories Which Tell of Life at the Time of Louis XIV, the French  
Revolution, and During the Early 1800s

- Doyle, Arthur Conan: *The Refugee, A Tale of Two Continents*, Harper and Brothers, New York, 1893. A story at the time of Louis XIV.
- Dickens, Charles: *A Tale of Two Cities*, Longman's English Classics Series, Longman's, Green and Company, New York, 1910. A Story of the French Revolution.
- Gras, Felix: *The Reds of the Midi*, A. Appleton and Company, New York 1916. A story of the French Revolution.
- Gras, Felix: *The Terror*, A romance of the French Revolution, D. Appleton and Company, New York, 1898.
- Hugo, Victor: *Ninety Three*, T. Y. Crowell Company, New York, 1915. A story of the French Revolution.
- Martineau, Harriet: *The Peasant and the Prince*, E. P. Dutton and Company, New York. A Story of the French Revolution.
- Mitchell, S. W.: *The Adventures of Francois*, The Century Company, New York, 1898. A Story of the French Revolution.
- Sabatini, Rafael: *Scaramouche*, Grosset and Dunlap, New York, 1921. Story of the French Revolution.
- Weyman, S. J.: *Red Cockade*, Longmans, Green and Company, New York, 1910. A Story of the French Revolution.
- Brooks, E. S.: *A Boy of First Empire*, The Century Company, New York, 1920. A story at the time of Napoleon.

## SECTION IX

### HOW, AFTER 1850, FRANCE BECAME ONE OF THE WORLD'S LEADING INDUSTRIAL NATIONS

#### AGRICULTURE DID NOT DIE DOWN IN FRANCE AS IT DID IN ENGLAND

You have learned how more than 90 per cent of the English have left their farms and gone to work in cities. Was that true in France?

Most of the peasants of France have remained on their little plots of land even to the present day.

A peasant family which has held the same plot  
of ground for 1,151 years

"Back in the days of Charlemagne [800 A. D.] when Frankish spear-men pursued the tusked boar across wild spaces where today blossom some of France's fairest vineyards, a lonely peasant staked his farm north of the present city of Toulouse. Here the energetic husbandman cultivated with the rude implements of those days his plot of ground, builded himself a habitation of sorts, and founded a family whose descendant has just been honored by the French government.

"The Minister of Agriculture has conferred upon Pierre Lafarque l'ordre du Mérite agricole; a special recognition accorded to all farmers who have tilled the same plot of ground for three or more centuries. The family Lafarque heads the list of this aristocracy of the soil in France with its record of 1,151 years on the original acreage acquired by Johanis Lafarque in 772!

" 'Surely, it is very hard sometimes,' said the present Pierre Lafarque recently in telling of his life on the 1,000 year-old estate. 'But here the earth is generous.'

"And the old man proudly pointed out to his guest the twenty-five acres of land planted with wheat and vines, with a wooded strip in the distance. Inside the large dining room are still to be seen beautiful cupboards and priceless wardrobes, heirlooms carefully preserved by frugal forebears. Mme. Lafarque, like her husband, still performs with the simple dignity of her peasant ancestors the homely tasks that were theirs.

" 'Why, certainly, Monsieur,' she said, 'I still spin.' And this wise



woman of a wise race added. 'I have never had to buy any sheets since I set up housekeeping.'

"So through the centuries has the French peasant clung with often painful tenacity to the same little corner of the soil. Hard working men and women, who sow their crops in the spring, garner them in the fall and go to church on Sunday. When the season is a good one, they, unlike the American farmer who puts his surplus into Fords and radios, buy an extra pig or a piece of new machinery."<sup>1</sup>

#### THE FARMS OF FRANCE ARE STILL SMALL

How many acres of land did Pierre Lafarque own?

In France his farm would be considered a very good sized piece of land—for the great majority of farms are 25 acres or less.

Do you know how American farms compare with these French farms in size? What farms do you know, and how large are they?

#### NOT SO MANY PEOPLE LIVE ON FARMS AND CULTIVATE THE LAND AS DID FIFTY YEARS AGO

#### NEVERTHELESS THE METHODS OF FARMING HAVE SO IMPROVED THAT THE AMOUNT PRODUCED ON THE FARMS OF FRANCE HAS FOR THE MOST PART INCREASED

We saw how the people of England abandoned the farms, and how they crowded into the cities.

In France the city population has increased somewhat and the country population has decreased. Some of the peasants have been leaving the farms and going to the cities to work in industry. But the shift from the farm to the city has been much smaller in France than in England.

You can see from this table just how much the country population has decreased from 1876 to 1911.<sup>2</sup>

Year	Total Population	Rural Population	Percentage of Whole Population Not Found In Rural Districts
1876	36,900,000	24,900,000	67.6
1886	38,200,000	24,450,000	64.1
1896	38,500,000	23,500,000	60.9
1906	39,250,000	22,700,000	57.9
1911	39,600,000	22,100,000	55.9

<sup>1</sup> Rice, Diana: *Ancients of the Land*. The New York Times Magazine, January 20, 1924.

<sup>2</sup> Clapham, J. H.: *The Economic Development of France and Germany, 1815-1914*; Cambridge University Press, London, 1921.

In 1911, 55.9 per cent of the people still lived in country districts. In the United States the proportion was about the same.

How does the per cent of people living in the country districts in France before the war compare with the per cent of the people in England who lived in the country districts at the same time.

#### HOW THE METHODS OF FARMING IMPROVED IN THE LAST 50 YEARS

Although more people lived on farms in 1876 than in 1911, the methods of farming had so improved that French farms were producing more than before.

For example after 1890 the number of modern machines used on the farms of France greatly increased. The farmers began to throw aside their old hoes, plows, and sickles, and to use the new plows, harrows, drilling machines, haymaking machines, and threshing machines.



FIG. 70. Farming Machinery Became More General in France After 1890<sup>1</sup>

You can see how these modern machines increased in one of the agricultural districts, Haute-Garrone, between 1892 and 1908.

<sup>1</sup> Brown Brothers, New York City.

	1892	1900	1908
Mowing Machines .....	450	7,000	15,000
Reapers .....	180	1,500	25,000
Reapers and Binders .....	60	800	1,200

These machines helped to produce bigger crops.

#### THE PRODUCTION OF BEET SUGAR IN FRANCE AFTER 1850 SHOWED A BIG INCREASE

In 1852 the output of beet sugar was about 50,000 metric tons.

In 1900 the output of beet sugar was about 1,100,000 metric tons.



FIG. 71. Where the Sugar of the World is Raised <sup>1</sup>

Did you see the little black splotch in the northeast corner of France? It looks small, but in reality, it's an important spot. That is where the 1,100,000 tons of sugar were produced in 1900!

However, even though France produces quantities of sugar, she still has to import a good deal of sugar from other countries. She was becoming an industrial country and so was depending on other countries for some of her food.

WHEAT IS ALSO AN IMPORTANT FRENCH CROP. THIS, TOO,  
HAS BEEN INCREASED BY THE NEW METHOD  
OF FARMING

Before the World War, France had *eight times as much land given to wheat raising as had the United Kingdom* and three times as much as Germany.

<sup>1</sup> Finch and Baker: *Geography of the World's Agriculture*, United States Department of Agriculture, 1917.



After 1862, the amount of land given to the raising of wheat decreased, but, due to the improvement in farming methods and machinery, the crop increased.

France, then, produced great quantities of wheat. Did she produce enough for her own use before the war? Look ahead in Section XI, on the United States, to Fig. ...., which is a bar graph showing the production and consumption of wheat in the leading countries. Was France able to export wheat or did she have to bring it in from other countries?

#### THE GROWING OF GRAPES HAS DECREASED

The growing of grapes to be made into wine was one of the few agricultural products before the war. This had happened as the result of a plague which destroyed many vineyards. Therefore of recent years, France had to import cheap wines, although she still made fine wines for which she was famous. These she sold to other countries.

#### GREAT QUANTITIES OF FRUIT AND VEGETABLES, BUTTER, EGGS, MILK AND POULTRY ARE RAISED IN FRANCE

Garden products and dairy products are among the most important of France's agricultural products. So large a supply of fine fruit and vegetables, butter, eggs, milk, and poultry does she have that she exports these products to other countries.

In 1911 there were 7,600,000 cows in France. The number of cows, as of all other animals except sheep, had been steadily increasing.

The great increase in garden and dairy farming had been made possible by the improvements in transportation. These foods spoil quickly, and can not be sent long distances unless they can be carried very rapidly.

Railroads and steamboats had made possible a great increase  
in this kind of agriculture in France

"There had always been belts of garden ground around the great cities. . . It was only after good roads and railways had come into general use, and news of market prices were telegraphed about, that any district could easily afford to raise merely one class of produce for which there were good markets at a distance. This began in France early in the nineteenth century (1800s), when the quick cross-channel steam packets began to carry butter and eggs and fruit and poultry to the London market. . .

But it was only late in the 1800s. . . that a steadily growing demand for French agricultural produce de luxe affected the agriculture of the whole country. . . Its products were known in all luxurious markets. The devices of French market gardening, the bell glasses and the weather screens, the



mushroom and asparagus caves are familiar. Brittany early sent vegetables all over western Europe. The prunes and crystallized fruits of the southwest, the flowers and strawberries of the Maritime Alps, the fruit of Burgundy—the list of good things, and the places where they are grown, is long and might easily be lengthened.”<sup>1</sup>



FIG. 72. Market Gardening in France. The Vegetables Are Protected From the Cold by Bell-Glass<sup>1</sup>

#### FRANCE, THEN IS STILL AN AGRICULTURAL COUNTRY

Before the war about half of the ground of France was under cultivation. *1914 France was almost able to feed herself.* She brought in a certain amount of some food products such as wheat, sugar, and wine. But on the other hand, she was able to export other agricultural products, such as her garden and dairy products.

France was not dependent upon the outside world for food to the same degree as England.

#### MAP EXERCISE

Use an outline map of France or make one yourself.

Show on this map where the sugar beets, the wheat, the grapes, and the cattle of France are raised. You can use different kinds of marks such as triangles, squares, circles, checks, and so on, to indicate the different agri-

<sup>1</sup> Adapted from Clapham, J. H.: *The Economic Development of France and Germany, 1815-1914*; Cambridge University Press, London, 1921, page 173.

<sup>2</sup> Brunhes, Jean: *Human Geography*. Rand, McNally & Co., Chicago, 1920, page 287.

cultural products. If you will look back at Fig. A, a map of the region at the eastern end of the Mediterranean, you will see how this kind of map is made.

FRENCH INDUSTRIES AND TRADE DEVELOPED AFTER 1850  
BUT SHE HAS NEVER BECOME AS GREAT AN  
INDUSTRIAL AND TRADING NATION  
AS ENGLAND

We saw that in 1850, due to certain causes, France was far behind England in manufacturing and trade.

After 1850 she developed more rapidly than before. But as we shall see she never developed into so important an industrial nation as England. Most of her industries were still comparatively small ones for the production of fine and beautiful articles. In these she far surpassed England.



FIG. 73. This Map Shows Where the Coal and Iron of France are Found, Where the Industries are and Where Canals have been Built <sup>1</sup>

Study the map, Fig. 73. In what way do the industrial regions of France seem to be different from those of England?

CAN YOU TELL WHICH IS THE CHIEF INDUSTRIAL  
REGION OF FRANCE?

No doubt you have noticed that the industries of France seem to be scattered over the country.

<sup>1</sup> Bowman, Isaiah: *The New World*, World Book Company, Yonkers, New York, 1921, p. 90.

However, there is one really important industrial region. This extends across the northeast corner of the country. You can see that this region is more heavily marked than the rest of the country.

Look at Fig. 73, a relief map of France. It shows the important industrial regions. On your map of the industries of France draw a line which will locate these industrial regions.

#### THE LOCATION OF COAL AND IRON THERE EXPLAIN THE LOCATION OF THE INDUSTRIAL REGION

The industries of France are gathered largely in the northeast corner, because the chief local coal and iron deposits are found there.

You see the long, dark splotches running through Lens. Here are located the best coal mines of France.

The best iron mines are in the region of Briey and below Nancy.

Within the industrial region there are iron foundries, cotton and woollen mills, pottery and china factories, furniture factories, and many other industries.

#### SINCE COAL IS SO NECESSARY TO INDUSTRIAL DEVELOPMENT, HAS COAL PRODUCTION IN FRANCE INCREASED?

We learned earlier that the coal seams of France are thin, and the coal poor. However, there was an increased production of coal from French mines after the middle of the 1800s as these figures show:

Year	Tons
1872 .....	16,000,000
1882 .....	21,000,000
1900 .....	33,000,000
1913 .....	41,000,000

(There is another good opportunity to make some bar graphs or line graphs.)

The production of coal more than doubled between 1872 and 1913. So France's coal supply *did increase*. Nevertheless the amount seems very small in comparison with the 292,000,000 tons mined in little Great Britain, and the 279,000,000 mined in Germany in 1913.

Indeed France had to import from Great Britain and Germany *half as much coal as she mined* in the years before the war.

It is very dangerous for a manufacturing country to have to depend on another country for coal! Why?



## SO MUCH FOR FRANCE'S COAL? WHAT ABOUT IRON?

Here is a story of one of the great iron centers of France. This particular town is not in the industrial district of the northwest, but in the center of France about eighty miles northwest of Lyons.

THE STORY OF LE CREUSOT—THE GROWTH OF  
THE SCHNEIDER IRON WORKS

"Le Creusot.

"Literally 'The hole.' In a more picturesque phrasing, 'the crucible.' . . .

"This Le Creusot is indeed the crucible. It is a deep bowl, set into the hills of the Department of the Saone-et-Loire. To be more readily understood, perhaps, this crucible of crucibles is situated in old Burgundy, some two hundred and fifty miles from Paris, but less than eighty northwest from the city of Lyons.

"For more than four centuries it has been a crucible. Under the highest of its guardian hills . . . lie vast deposits of iron; coal is not far distant. So it is no wonder that four hundred years ago the peasants of the neighborhood began crude workings for the valuable fuel. . . Le Creusot was born. The iron deposits were unearthed. A foundry was set up. Then a glass-works. The foundations of what has come to be one of the great industries of the earth was firmly laid.

"By the middle of the eighteenth century (1700s) Le Creusot had attained an aristocratic distinction. Its chief institution was now known as the Royal Foundry. Rebuilt in 1782 into the form of a hollow square it came under the direct patronage of Louis XVI. It became one of the favorite playthings of Marie Antoinette. For her it fabricated not only the exquisite glass-ware, but many of the lovely iron grills for Versailles. . . Throughout the day and far into the night its flares lighted up the little village about it.

"During the Napoleonic wars the foundry acquired an added prestige. No longer came such fripperies as iron grills or lamp-standards from its furnaces. Le Creusot was manufacturing guns. . .

"After the fall of the Empire, sleepy days in which stricken and disillusioned France sought to recover from her many wounds and in which there was little for Le Creusot to accomplish, the glass-works faded away—forever. . . Even the iron works faded to next to nothing. Rust and mold crept in upon the great furnaces.

"In the ancient province of Lorraine there lived a century ago two brothers who had acquired a local distinction because of their skill in iron-mongering. Their names were Schneider—Joseph Eugene and Adolf. . . With keen vision they foresaw the coming of the iron age, of the domination



of the steam-engine and of the industrial revolution which was to follow in its train.

"Joseph Eugene Schneider heard of the all but abandoned Royal Foundry . . . visited it and in 1832 purchased the property and moved his family to it. . . .

"Le Creusot . . . was a simple affair. Joseph Eugene Schneider was struggling with the beginnings of his business. His opportunity was vast, always his was the dream of the coming of the steam engine. Great Britain already was in her industrial transportation because of this invention. France rapidly was following suit. The steam engine driving a ship was a commercial success. The steam-engine pulling cars upon a track, of wood or stone—or far better still, of iron—was already an accepted institution in England. Again conservative France was following the lead of her neighbor across the channel. The Paris-Orleans Railway had come into existence. A dozen others were being planned. . . It irked France to have to buy her earliest locomotives of England.

Schneider saw that particular opportunity. In 1833 at Le Cresuot he built the first all-French locomotive. Others followed. In a few months they were following upon the rails laid out of the crucible. The fact that for more than sixty years the town had stood at the top level of the historic Central Canal, connecting the Loire and the Rhone, was little to it once the railroad had come. No longer would the plant be dependent upon water transport alone for its coal—the modest fuel resources of the immediate neighborhood could not stand continued large demands without complete exhaustion, but the railroad would bring it within easy touch of the great mines of the Lens area, with those of the Saar, of the Ruhr—everywhere else within continental Europe.

"They have been building locomotives at Le Creusot ever since, for the past three years at the swift rate of a new locomotive each working day. This would not be a bad performance for one of our large American plants, particularly when one comes to realize the high intensive perfection of the French locomotive, with its copper lined firebox and the infinitude of mechanical refinements that it bears. But our locomotive builders in the United States are locomotive builders, and nothing else. At Le Creusot, as we shall see presently, a huge railway locomotive is but a single one of a large variety of products fabricated from iron. It is but a single link in a long chain of diversified production.

"Yet the chief output of Le Creusot—the one upon which it has won its greatest fame, has been cannon. . . .

"I went to 'the crucible' . . . Night—dark night—when I first arrived, yet all made silvery by the light of the springtime moon. Blue moonlight

and the flickering white spottings of the arc lamps of an industry that never sleeps. The red and yellow flares of the furnaces. . . .

"'Altoona,' said I to myself.

"The resemblance of the great shop-center of the Pennsylvania Railroad was most astonishing. The encircling hills, the air of great energy, the one industry town in which I was to spend the night, were intimate reminders of similar hasty visits to the railroad center of the northern Alleghenies. . . .

"And so I saw that industrial center of the new France. . . . We saw the iron ore come virgin from the earth and go into 'pig.' Pig-iron became ingot steel. And ingot steel became locomotives and motor-tracks and steel railway-cars and taxi-cabs and sugar mill machinery and tractors—all at Le Creusot. This was not merely Altoona now, turning out railroad cars and engines solely, it was Pittsburg, Youngstown, Cleveland, diversified industry, if you please. . . . The chief engineer of the great plant was at my elbow. He was trying to explain to me the final technical details of steel-making. . . . But the mere processes of manufacture again left me cold. I only saw Frenchmen . . . naked to the waist, struggling at furnace doors, which opened to show the glares of the bell-holes that they encased; Frenchmen rolling out twenty-ton ingots, almost as mobile and as yellow as molasses candy. Frenchmen turning hose-water on steaming slag and sending white clouds up into the blue skies. . . .<sup>1</sup>

So, you see, there are important iron works in France—iron works that can be compared with the great works in the Pennsylvania steel regions in the United States.

Nevertheless, France has not developed her iron and steel industry on the same scale as have England, Germany, and the United States

Why? Again the answer is—coal. The other three countries have large coal deposits. France has not.

France's iron industry has grown, however, particularly since the 1890's. Read its growth from the next table.

	Tons of Cast Iron Produced		Tons of Wrought Iron and Steel
About 1890 1913	2,000,000 5,000,000	1899 1912	2,000,000 3,775,000

Because of her large iron resources, however, 22,000,000 tons of iron ore were being mined in 1911—for the most part from the region around Briey and Nancy. Look up these regions on your industrial map. Fig. 73.

<sup>1</sup> Hungerford, Edward: Le Creusot, France's Crucible. *Our World*, October, 1922, New York, pp. 83-88.

What happened to the surplus iron ore, the ore that could not be melted and made into engines, tracks, bridges, and guns in France?

Of course you know. The iron ore was exported to other more highly industrialized countries—Germany and England.

*France became the greatest exporter of iron ore in the world.*



FIG. 74. This Map Shows the Iron Ore Resources of the World <sup>1</sup>

The map Fig. 74 shows the iron ore resources of the world. What percent of the world resources does France have? How does she compare with other countries?

In England and in Germany the ore was made into iron and steel products which were sent back to France. For France could not produce all the iron and steel products she needed. She imported for example, many locomotives.

Coal and iron! They make the life of modern nations what it is.

#### THE USE OF STEAM POWER INCREASED GREATLY AFTER 1850.

We have seen that before 1850 water and hand power were still used far more widely than steam in French industries.

After 1850, however, the amount of steam power increased rapidly and as the use of steam power increased, more and more goods were produced.

Study the next two tables. They tell the story.

<sup>1</sup> *Industrial Digest*, 1922.

Year	Amount of Steam Power Used in All France
1840	34,000
1913	3,539,000

This happened in 73 years. What a transformation!

What conclusion can you draw from the following table?

Year	No. of Power Looms in France	Hand Looms
1873	6,000	110,000
1888	19,000	75,000
1903	38,000	50,000

Does the extent to which a country uses steam power tell anything about the extent to which it has become industrial? What does it tell?

You see, France was becoming industrialized, but she still clung to many of the old methods. In 1903 there were still 50,000 hand looms in the silk industry.

THE INDUSTRIES OF FRANCE CHIEFLY PRODUCED GOODS OF FINE QUALITY—  
SILKS, COTTONS, PORCELAIN, GLASS, FURNITURE, READY-MADE  
CLOTHES, PERFUMES WERE CONSTANTLY GROWING

The beautiful silks made in the Lyons district (point out Lyons on the wall map) were made largely for other countries. 66 per cent of the silk produced in France was being exported in 1913. The United Kingdom received 65 per cent of the French silk exports, and the United States received 15 per cent.

In the northeastern corner of France, in the industrial district, a large cotton industry had grown up. Lille, Roubaix, and other towns in this region contained many cotton mills, which wove into cloth, cotton imported from America. (Point these towns out on the wall map.) The cotton industry of France never became, however, as large as the cotton industries of England and Germany.

On the other hand, in the making of certain luxuries such as glass, china, furniture, and perfume, France had no equal as all the world knew, since all the world bought these luxuries from France.

For many years France carried on a large trade.

The trade of France was not so large as that of England, but still she found the products of other countries necessary to her life. She traded



chiefly with Great Britain, Germany, Belgium, and the United States. Here are lists of her chief imports and her chief exports.

CHIEF IMPORTS	CHIEF EXPORTS
Wine	Arms and munition
Wool	Textiles (silk and cotton)
Cereals	Wine
Raw cotton	Raw silk and yarn
Coal and coke	Paris goods
Coffee	Leather
Oil seeds and fruits	Metal goods and tools
Chemical products	Automobiles
Petroleum	Chemical products
Machinery	Pottery and glass
Copper	Clothing
Cast iron and steel	Rubber goods
Woollen textiles	Table fruits
Arms and ammunition	Milk, butter, Cheese
Metal goods	Iron ore

France, before the war, was largely a country of small industries devoted to the production of fine goods.

In the heavy industries of coal and iron and machine making she was behind England, Germany, and the United States. She exported luxuries, dairy and garden products, and iron ore and imported food, raw cotton, coal and steel products.

#### EXERCISE

Write a description of what would happen if France were cut off and could not trade with the outside world. State in what ways France would be better off and in what ways worse off than the United Kingdom under the same conditions.

#### THE CITIES AND AN INTERNAL TRANSPORTATION SYSTEM GREW TOGETHER IN FRANCE

In England, cities grew and railroads and canals were built as the industrial revolution advanced. We find the same thing true in France.

#### FRANCE HAS AN EXCELLENT SYSTEM OF INLAND WATERWAYS

Canals were built even before the industrial revolution started in France. As the industrial changes continued, and as more methods of trans-

portation were needed, old canals were improved and new ones were built. These proved valuable for the transportation of goods within the country, and this waterway system was improved until now it is possible to carry goods entirely by water from the north to the south of France, and from east to west.



FIG. 75. A French Canal <sup>1</sup>

Of course, in many places these waterways have fallen into disrepair and so are not used nearly as much as would be possible if they were kept in good condition.

There are 4,512 miles of navigable rivers and 3,031 miles of canals in France. Compare the length of these waterways with the distance across the United States. Remember the size of France in comparison with the size of the United States.

If you will look back at the industrial map of France, Fig. 73, you will find the chief waterways. Not all the rivers and canals are shown on this map—only the most important ones. What rivers do the canals connect?

Is Paris well situated to send and receive goods by water? Is Lyons? Is Nancy? Is Lille?

#### AFTER 1850 A GOOD SYSTEM OF RAILROADS WAS BUILT

We found that railroads first became important in France in the 1840's and that a plan was made for a complete railroad system.

---

<sup>1</sup> Brown Brothers, New York City.

After 1850 this plan was carried out. North, south, east and west of France were bound together with railroads.



FIG. 76. The Railroads of Europe <sup>1</sup>

Do you see how the railroads of France center in one point? Paris is the hub of the French railroads. Paris is the largest city of France, and next to London in size of the European cities.

Thus the most important city of France is connected with all the other cities of the country.

There are 25,766 miles of railway in France, not so many miles of railway in proportion to the area of the country as in the United Kingdom. *An agricultural region requires fewer railroads than an industrial region.* How does that statement apply to France and England?

#### TOWNS AND CITIES HAVE INCREASED IN SIZE AS TRANSPORTATION IMPROVED

Transportation improves and cities grow as a result of industrial development. Improved transportation enables cities to grow still larger, because then city products can be carried away and food and raw materials brought into the city.

France has a number of large cities.

<sup>1</sup> Huntington, Ellsworth and Cushing, Summer W.: *Principles of Human Geography*; John Wiley & Sons, Chapman Hall; 1921, p. 72.



Paris contains almost 3,000,000 people, and there are fourteen other cities with a population of over 100,000. These cities the transportation system of France has helped to build.

Have the cities grown as fast in France as in England? We found that they had not done so before 1850.

You can find out how fast the city population of France has grown of late years both in numbers and in proportion to the whole population, if you will turn back to the table which shows the decline of the rural population. How can you find out from that table?

The city population of France has, it is true, not grown as fast as that of England. But, as we said before there are many important industrial and trading cities. Of these cities Lyons is one of the most important industrially.

#### LYONS, THE CENTER OF THE SILK INDUSTRY AND OF OTHER FRENCH INDUSTRIES

##### HOW LYONS PLANS TO FURTHER IMPROVE HER WATERWAYS AND SO INCREASE HER TRADE AND INDUSTRY

“‘Paris plays—Lyons works.’

“So has it ever been. The great gay capital city by the Seine, despite her vast commercial name always has been the butterfly of France; the widespread industrial community at the confluence of the Rhone and the Saone, its grub-worm. The one is a city of hotels; the other is miserably supplied with a few of decidedly second rank which cater to the buyers who come to the chief industrial city of France from every corner of the world. For Lyons is far more than the second city of the French republic. Lyons is the chief hope of French industrial progress. . . .

“The site of Lyons is very lovely. Two fast-flowing rivers, the Rhone and the Saone, unite within it, after running parallel to one another, hardly a half-inch apart, for nearly three miles. Hence, Lyons is a city of Bridges.

“On this narrow, tongue-shaped neck of land between the two rivers, the busy commercial heart of the industrial metropolis of France, her City Hall, her Post office, her Bourse, her Opera House, her hotels, her banks, her retail shops, all that goes with the life of a city of more than half a million folk. . . . To the north are hills; and to the east of the Rhone Lyons spreads flatly upon a broad and rolling plain. . . . A Cincinnati, if you please—Cincinnati in the very heart of France. . . . A city in its ceaseless industry more than ever resembling Cincinnati. Or, better still, Paterson, New Jersey. For long since has Paterson with its hundreds of thousands of ceaseless silk-spindles been called ‘the Lyons of America.’ . . .

“Since 1850 there has been a tendency toward the introduction of a



varied industry. The metallurgical industry has been encouraged to come to Lyons. . . . From her factories today come many metal products of almost every sort. She has one of the largest, if not indeed the largest automobile factory in all France. There are great shops, both for the repair and the construction of railroad cars and locomotives.. . .

"The most indispensable aid to the city of Lyons at this time,' says its Mayor, 'is a real industrial harbor. That, we are very much lacking. Yet modern docks are the indispensable implement for our future prosperity. Look right around us in this part of France. Chalon, upon the upper Saone, is this minute demanding modern installations of docks and wharves. St. Etienne complains bitterly of its need of a waterway for the transport of its engraved-iron products and its coal. Roanne is in a similar plight. Grenoble is moving uneasily toward similar relief. The Rhone should be a vast asset to Lyons. Up to the present time it has remained a sadly-neglected one.'

"It is easy to catch the drift of the Mayor's thoughts. Theoretically, the Rhone is navigable, from the Mediterranean up to Lyons and, by the tributary Saone, far beyond. Each time that I have visited the silk city has been in the season of spring floods and the Rhone, in consequence, is an utterly unnavigable roaring torrent, barely held in check by its dikes. In other seasons of the year the river falls in a thin and lazy stream, with gravelly islets showing here and there and everywhere along its course. . . .

"The Mayor's idea is at once to rectify this condition. To make both the Rhone and the Saone navigable . . . for real and constant navigation.

"Just to the north of Lyons the Rhone bends quickly toward the east. It is part of its course down from the Swiss Mountains. In the turn, lies the newer, industrial portions of Lyons. . . .

"Across this plain the engineers of Herriot plan to dig a canal, a little less than eight miles in length and about seventy feet in width. . . . Starting well above the city . . . the proposed canal would enter the Rhone below them, at both the point where it leaves the Canal de Jonage and at that where it re-enters the Rhone there would be elaborate inner harbors, with docks, warehouses, railway connections and all the rest of that which goes to make a real practical harbor.

"The Mayor says:

"Of the improvement of the lower Rhone we shall see to it that the authorities at Paris take good care.'"

---

Thus are industries, cities, and transportation systems bound up together. Each demands the other.

<sup>1</sup> Hungerford, Edward: France's Spokesman to Russia, *Our World*, January, 1923, New York, pp. 65-68.

WE HAVE STUDIED THE INDUSTRIAL AND AGRICULTURAL DEVELOPMENT OF FRANCE; WE FOUND IN WHAT WAYS SHE WAS DIFFERENT AND IN WHAT WAYS SHE WAS LIKE ENGLAND. WE HAVE FOUND THAT THOUGH SHE REMAINED FOR THE MOST PART A COUNTRY OF FARMS AND SMALL INDUSTRIES, SHE WAS INCREASINGLY DEPENDENT ON THE OUTSIDE WORLD

#### MAP EXERCISE

1. On an outline map of France (a) locate the following industrial cities; Paris, Lille, Briey, Nancy, Lyons; (b) draw a line cutting off the industrial districts of France; (c) locate the most important coal field; (d) locate two important iron regions.
2. Exchange maps with a neighbor. Correct his map, writing on the margin the name of each city or region which is incorrectly located. Return your neighbor's map and receive your own.
3. Learn the location of each region that you missed. Try to follow these steps:

*First:* Compare your work with the correct location on a geography map. Note exactly wherein your work is wrong.

*Second:* Close your eyes and try to see in your mind a correct picture of each location that you missed.

*Third:* Study the geography map again to see if the picture in your mind was correct.

*Fourth:* If not, study the map carefully then close your eyes and try this process until you can picture correctly each location that you missed.

*Fifth:* On a clean map repeat the test, exchanging paper again with your neighbor correcting his test and having him correct yours.

#### TEST FOR SECTION IX

I. Answer the following questions in the proper columns:

	In England	In France
(a) Are most farms large or small? -----		
(b) Who owns most of the land? -----		
(c) What percent of the population lives on farms? ----		

II. Mark out the words that are wrong and fill in the blanks in the following sentences:

Although the number of people on the farms of France grew  $\left\{ \begin{smallmatrix} \text{larger} \\ \text{smaller} \end{smallmatrix} \right\}$  after 1870 the production of crops increased. This was because of the introduction of \_\_\_\_\_ and \_\_\_\_\_. Two important crops which showed this increase were \_\_\_\_\_ and \_\_\_\_\_.

III. Some of France's agricultural products are exported, while some are not sufficient for her own needs. Make a check mark in the proper column, after each of the following products. If the product is both exported and imported, put check marks in both columns.

	Exported	Imported
Beet Sugar is _____		
Wheat is _____		
Wine is _____		
Fruit and Vegetables are _____		
Dairy Products are _____		
Poultry is _____		

IV. Cross out the incorrect words in the following sentences:

France has  $\left\{ \begin{smallmatrix} \text{smaller} \\ \text{larger} \end{smallmatrix} \right\}$  coal deposits than England and she  $\left\{ \begin{smallmatrix} \text{imports} \\ \text{exports} \end{smallmatrix} \right\}$  coal. Her  $\left\{ \begin{smallmatrix} \text{small} \\ \text{large} \end{smallmatrix} \right\}$  quantities of coal caused her industrial development to proceed  $\left\{ \begin{smallmatrix} \text{slowly} \\ \text{rapidly} \end{smallmatrix} \right\}$ . The iron deposits of the country are  $\left\{ \begin{smallmatrix} \text{small} \\ \text{large} \end{smallmatrix} \right\}$  and France  $\left\{ \begin{smallmatrix} \text{imports} \\ \text{exports} \end{smallmatrix} \right\}$  iron ore. Her iron and steel industries are  $\left\{ \begin{smallmatrix} \text{more} \\ \text{less} \end{smallmatrix} \right\}$  highly developed than those of England.

V. Check the statements below which you think are true.

1. The growth of industries causes cities to grow.
2. The growth of industries causes transportation systems to be built.
3. The growth of cities causes industries to grow.
4. The growth of cities causes transportation systems to be built.
5. The building of transportation systems causes industries to grow.
6. The building of transportation systems causes cities to grow.

VI. What conclusion do you draw from the six statements of No. V.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

BOOKS FROM WHICH YOU CAN GET ADDITIONAL INFORMATION  
ON INDUSTRIAL FRANCE, 1850-1924

- Allen, Nellie B.: *Europe*, Ginn and Company, Boston, 1913.  
 Fishing industry in Brittany; pages 288-294.  
 The French Peasant; page 334.  
 Silk manufacture; pages 363-372.  
 Perfumes; pages 384-392.
- Allen, Nellie B.: *The New Europe*, Ginn and Company, Boston, 1920.  
 The wine country; pages 337-338.  
 Alsace-Lorraine; pages 339-345.  
 Silk manufacture; pages 376-384.  
 Perfumes; pages 408-411.
- Camarque: The Cowboy Country of Southern France. *National Geographic*, Vol. 42, July, 1922; pages 1-34.
- Carpenter, Frank G.: *Europe*, American Book Company, New York, 1912.  
 Rural France; pages 85-95.  
 Commercial and manufacturing France, pages 95-106. Paris; pages 106-117.
- Scenes from France: *National Geographic*, July, 1921, Vol. 40; pages 29-43.
- Finnemore, John: *France Peeps at Many Lands*, A. and C. Black, Ltd., London, 1915.
- The Mysterious Prehistoric Monuments of Brittany: *National Geographic*, July, 1923, Vol. 44; pages 53-69.
- Osgood, Ellen L.: *A History of Industry*, Ginn and Company, Boston, 1921. France from 1815-1924; pages 306-308.
- Smith, J. Russell: *Commerce and Industry*, Henry Holt and Company, New York, 1916; pages 366-373. Excellent maps on wine producing areas and of waterways.
- Stevenson, R. L.: *An Inland Voyage*, Charles Scribner's Sons, New York, 1912. A story of a trip in France.
- Stevenson, R. L.: *Travels With a Donkey in the Cevennes*, Charles Scribner's Sons, New York, 1917. A Story of a trip in France.
- Through the Back Doors of France: *National Geographic*, July, 1923, Vol. 44; pages 1-52.



## SECTION X

### FRANCE BUILT UP THE SECOND LARGEST EMPIRE IN THE WORLD, 1850—1919

When did France build up her Empire? Why did she build it? Was it connected with her industrial development? These are the questions we shall now try to answer.

You have learned why England built up her Empire. Name those that you can, off-hand.

If we could take up each of the French Colonies and its history we would find that France had much the same reasons for adding to her Empire that England had. The Colonies were rich in raw materials; or there were good markets for her goods, or there were good fields in which to invest money in railroads, factories, and so on; they held important positions on trade routes. These were the chief reasons.

Look back at the map of the French Empire, Fig. 69, page 180.

Do you see any colonies which occupy important positions on trade routes?

Do you see any colonies which are so located that they probably produce food and raw materials?

#### WHEN WERE THE COLONIES ADDED TO THE EMPIRE?

Here is a list of the colonies of the French Empire, and the dates on which they were added to the Empire.

COLONIES IN AMERICA:		Guinea	1843
St. Pierre and Miquelon	1635	Ivory Coast	1843
Guadeloupe	1634	Dahomey	1893
Martinique	1635	Maurelania	1893
Guiana	1626	Niger	1912
		Congo	1884
COLONIES IN OCEANIA:		Cameroon	1919
New Caledonia	1854-1887	Reunion	1919
Tahiti	1841-1881	Madagascar	1643-1896
COLONIES IN AFRICA:		Mayotte	1843
Algeria }	1830-1902	Soma	1854
Sahara }			
Tunis	1881	COLONIES IN ASIA:	
Seriegai	1637-1889	India (French)	1679
French Sudan }	1893	Indo-China	1861-1892
Upper Volta }		Syria	1922

You see that the dates extend over a long period.

There are some colonies which the French took as far back as the 1600s. There is one which was added to the Empire as recently as 1922.

Let us divide the colonies into four groups

When there are two dates after a colony, use the last one, the date on which the colony was finally added to the Empire.

1. Those acquired before France met defeat in 1815. The colonies are all that France has left of her old great empire.

2. Those acquired between 1815 and 1880. This was the period when France was weak industrially. 1880 may be taken to represent the beginning of the time when her industries and her interest in acquiring colonies took an upward spurt.

3. Those acquired between 1880 and 1918 (the end of the World War).

4. Those acquired from 1918 to the present time as a result of the war.

#### MAP EXERCISE

It will be interesting to see during what period France added most to her Empire.

Take an outline map, and make a map of the French Empire like the period map of the British Empire, Fig. 33. Use a different kind of shading for each period, and show which colonies were added at each period.

Which period was the most important in the development of the Empire?

The story of the distant lands brought under the control of the European countries is one of the most exciting and interesting stories we know. We wish we could tell you the story of each colony, of its people, their customs, and the way they live, of the coming of the Europeans, of the mercilessness of their dealings with the natives, of the resources which they exploited, and of the changes they made in these industrially undeveloped lands.

But it would take too much space to tell all these stories, and we must satisfy ourselves with telling you just a little merely of one or two. Perhaps you will want to read others for yourselves sometime.

#### FRENCH INDO-CHINA, HOW FRANCE EXTENDED HER POWER IN FAR ASIATIC LANDS

On the map of the French Empire find French Indo-China. The splash of black may not look so very large, but it is bigger than France itself.

This is a romantic country with a romantic story. France took it after 1884 for very unromantic reasons. You may be sure that France had hard-headed, unromantic business reasons for wanting these lands.

For French Indo-China is a great rice-raising country, a country of cotton, maize, tobacco, coffee, pepper, silk, hides, cattle, palm sugar and many

There are, also, valuable metals, iron, copper, zinc, and gold.

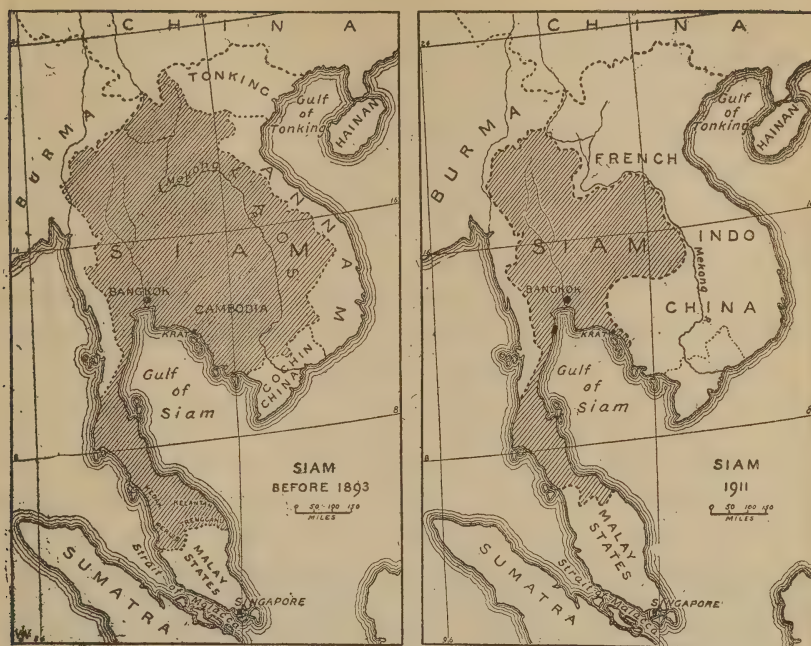


FIG. 77. France Constantly Added to Her Empire by Taking Slices Off of Siam. These Maps Show How Much Territory Was Taken From Siam Between 1893 and 1911 <sup>1</sup>

It was about 1861 that the French began to gain a foothold in Indo-China.

"Starting from the southern point of the peninsula, Cochin-China, . . . control was extended over the eastern part of Cambodia. In 1884, Annam and Tonking, on the coast of the China Sea . . . were under French protectorate. During the past thirty years, the hinterland has been gradually penetrated and occupied."

This extension of territory has taken place at the expense of Siam.

"During these thirty years, Siam has been robbed of portions of her sea-coast as well as of the great valley of the Mekong, leading to China. . . . The history of French and British diplomacy in Siam is an example of the way Europeans took lands in Asia. Never once have considerations of right and justice entered into the minds of the statesmen and diplomats, the generals and admirals, who bullied Siam. . . .

"Relations between Siam and France were most friendly until France began to penetrate into the hinterland of Indo-China. As . . . administrative control was extended over the Kingdoms of Cambodia, Annam, and

<sup>1</sup>Gibbons, Herbert Adams: *The New Map of Asia*; The Century Company, New York, 1919; page 99.

Tonking, the French found forests and mineral wealth which they desired to take for their own."

France insisted on permitting her business men to exploit these resources, even though the territory really belonged to Siam. Siam refused.

"A French fleet blockaded Bangkok, and Siam was compelled to sign a treaty under threat of bombardment. The Siamese would have signed themselves to this injustice, but the French did not intend to let the occasion slip to get complete control of Siam."

The French were prevented from swallowing Siam only by England who had colonies to the south and west of Siam, and who did not wish to see her rival, France, grow stronger in Asia.

"In the meantime, other complaints had been accumulating against France. Although the Siamese had loyally fulfilled the stipulations of the treaty of 1893, the French had not carried out their side of the bargain. In 1901 Siam demanded that France fulfill the promise to evacuate the port of Chentabun, and to allow Siam to resume control along the Mekong River and in the Angkor-Ballambang district, which was an integral part of Siamese territory.

"The French, however, now demanded further concessions. They wanted to extend their control across the Mekong, to have exclusive commercial privileges in the Mekong Valley, and to force Siam to employ Frenchmen in Siamese government service.

"The Anglo-French agreement of 1904, which settled questions all over the world, defined the attitude of France and Great Britain toward Siam. Siam was not consulted in the matter. . . . The two great colonial powers had exclusively in mind their own political and commercial interests. Great Britain recognized the right of France to extend her influence in the eastern provinces of Siam in return for French recognition of Great Britain's right to detach other Siamese territory in the neck of the peninsula."<sup>1</sup>

As a result France further extended her territories in Indo-China. She had control of the valuable Mekong River by which products are carried back and forth in Indo-China, and by which goods are carried to China and to the sea ports.

#### THE VALUE OF FRENCH INDO-CHINA

"The tip of the peninsula, between the Gulf of Siam and the China Sea is the colony of Cochin-China. Its capital, Saigon, is one of the world's large rice ports. Most of the land of the colony is the delta of the Mekong River, and produces over two million tons of rice annually. Vegetables,

---

<sup>1</sup> Adapted, *Ibid*; pp. 77-84.



fruits, and cotton yield large crops. The country binds itself equally well to stock raising and forestry, and fishing is a thriving industry on the coast. . . .

"Annam is a strip of coast, with a narrow hinterland extending nine hundred miles along the China Sea and into the Gulf of Tonking. . . . Annam has many small industries of which silk production and silk weaving promise well. . . .

"Tonking, which was until 1897 a tributary of Annam presents quite a different picture. Its capital, Hanoi . . . has become a railway center and is the administrative capital of Indo-China. One of the most important railway projects in the Far East links up Haiphong, the port of Hanoi, with Yunnan, capital of the second largest province of China, and diverts the trade of millions of Chinese through Tonking. . . . Tonking, with hardly more population than Annam, has nearly fifteen times as valuable import and export trade. . . .<sup>1</sup>



FIG. 78. The Chief Highways of Indo-China are Waterways<sup>2</sup>

"In spite of its sparse population, Laos has great agricultural possibilities. But the natives are hostile to the French. The value of the country to France lies in the gold, tin, and lead mines and in the teak forests. Logs can be floated down the Mekong, of which the French have succeeded in gaining control from Siam."<sup>1</sup>

<sup>1</sup> Asia, Vol. XXIII, September, 1923, New York; p. 672.

<sup>2</sup> Adapted Ibid; pp 102-106.

## A TRAVELLER DESCRIBES TONKING

"The country, as I watched it from the train windows, was the flattest place in the world. The rainy season and 'winter' were coming to an end. Great blue black buffaloes waded knee deep in the inundated fields, churning the ground into readiness for the first rice planting. All the wide area was dotted with mushroom hats bent far over in the back-breaking task of setting out the young shoots. These were being transplanted from tingling green seed-beds, the solitary bit of color in a sad expanse of dike and water. Everywhere artificial irrigation was going on. Women stood facing each other in pairs, swinging a deep bamboo basket by ropes held in both hands. With one movement of their arms, they dropped the basket into the irrigation-ditch or reservoir, swung it upward and emptied it into the field with another, and then let it drop back again with mechanical precision. The common statement that a Tonkingese farmer, in spite of his two rice crops a year, can earn the equivalent of but five American cents a day, was borne out by the look of the scattered villages we passed, groups of flimsy thatched hovels often standing in stagnant water behind stockades of bamboo. Over the rice-terraced land, now and again broke heavy rainstorms, beautiful to look at from behind train windows but disastrous and lonely for those who were without. When the rain stopped, the sun again chastised the land and made the watery fields glitter intolerably. There was something hypnotic in that vast plain. Individually dwindled and flickered out. In the great sharing of common toil and common poverty, there were no longer any people, only earth-bound workers."<sup>1</sup>



FIG. 79. Preparing Land for Rice-Planting With the Aid of Water-Buffaloes<sup>2</sup>

<sup>1</sup>Emersen, Gertrude: *Backwater of Empire in French Indo-China; Asia*, Vol. XXIII, September, 1923, New York, page 673.

<sup>2</sup>*Asia*, Vol. XXIII, September, 1923, New York, p. 670.

## THE OLD CITY OF HANOI WHICH IS THE CAPITAL OF INDO-CHINA

HANDICRAFTS LIKE THOSE OF EUROPE IN THE MIDDLE AGES STILL EXIST IN INDO-CHINA, AND AS IN THE TOWNS OF THE MIDDLE AGES, MANY STREETS ARE NAMED AFTER CERTAIN TRADES

"... The heart of Hanoi throbbed to a rhythm of long ago, there in the narrow jostling streets. . . .

"Each street is a counter in a department store, Brass Street, Street of Cups, Cotton Street, Sugar Street, Trunk Street, Street of Sails, Hat Street of the Paper Village, a Street for each wanted thing in all Tong-King. The little shops touch elbows. I walked down the Street of Cups where plates and handleless teacups and tiny teapots were stacked on low tables projecting into the road. I turned a corner into Brass Street where round shining trays and pots and kettles and slim-necked vases of inlaid bronze were ranged on shelves or standing in crowded corners. Through rear doors I saw the metal workers tapping, tapping, infinitely skilful, infinitely patient."<sup>1</sup>

Such is the land which has been added to the French Empire. Why has it been taken? Those who have studied the matter fairly agree that it is largely for the sake of its natural resources and its agricultural products.

Do you see that when France became industrial, her business men like those of England pushed out into undeveloped lands and built an Empire?

## THE MEDITERRANEAN HAS BEEN IMPORTANT IN FRENCH HISTORY AS IN ENGLISH

We saw as we studied England why the English desired to control the Mediterranean and the countries around it. France, too, has desired colonies on the Mediterranean Sea.

Why? Because this sea is the chief trade route to the east, because there are large populations on the shores of the Mediterranean to buy the products of industrial nations, because railroads, roads, harbors, and factories provided a profitable way of investing money, because there were valuable resources, such as oil.

## WHAT LAND DOES FRANCE HOLD ON THE MEDITERRANEAN?

The struggles of the European industrial countries, particularly Great Britain, France and Germany have centered in this region. These industrial countries have fought each other for the control of Asia Minor, Syria, Mesopotamia, Egypt, Algeria, and Morocco.

<sup>1</sup> Ibid. p. 674.



In some cases one country has come out ahead and in other cases, another. But today, Great Britain and France between them control most of the important lands of Africa and Asia which border on the Mediterranean.

Make a list of the French colonies which border on the Mediterranean.

#### PERHAPS YOU WOULD LIKE TO LEARN MORE OF SOME OF THE FRENCH COLONIES

Would you like to know about the people and their customs, and the way in which France got control of these lands, and why she took them? If so, you would find the following colonies interesting to study in the way you did the colonies of the British Empire: Syria, Morocco, Algeria, French West Africa (including several colonies), French Congo (including several colonies), Madagascar.

Each pupil should choose one colony about which he is to read up. In the city library books can be found which describe how the people live in these colonies and how they came to be a part of the empire of France.

Make reports to your class of what you learn.

#### MAP EXERCISE

The French Empire comprises the following territories and populations scattered over the whole world:

IN EUROPE	IN AFRICA	IN AMERICA
France	Morocco	St. Pierre and Miquelon
	Algeria	Guadeloupe, etc.
	Tunisia	Martinique
IN ASIA	Sahara	French Guiana
Syria	French West Africa	
India (French)	Congo	IN OCEANIA
French Indo-China	Cameroon	New Caledonia
	French Equatorial Africa	Tahiti, etc.
	Reunion	
	Madagascar	
	Comores	
	Somali Coast	

1. On an outline map of the world color in and letter each of these territories.
2. Exchange maps with a neighbor. Correct his map, writing on the margin the name of each region which is incorrectly located. Return your neighbor's map and receive your own.



3. Learn the location of each region that you missed. Try to follow these steps:

*First:* Compare your work with the correct location on a geography map. Note exactly wherein your work is wrong.

*Second:* Close your eyes and try to see in your mind a correct picture of each location that you missed.

*Third:* Study the geography map again to see if the picture in your mind was correct.

*Fourth:* If not, study the map carefully then close your eyes and try this process until you can picture correctly each location that you missed.

*Fifth:* On a clean map repeat the test, exchanging paper again with your neighbor correcting his test and having him correct yours.

---

We have watched the industrialization of France; we have seen that she came to depend more and more on the outside world: that her trade increased and that she built up a great empire

WAS SHE LIKE ENGLAND, AFFECTED BY THE GREAT WAR? DID THE  
RUIN OF PARTS OF FRANCE AND OF OTHER PARTS OF THE  
WORLD UPSET HER DELICATE ECONOMIC ORGANIZATION

It would look as though France had profited greatly by the war. She got hold of industrially important territory in Europe. She took from Germany Alsace-Lorraine with its iron, potash, and salt deposits. She took the coal mines of the Saar Valley. And more recently she marched in and took possession of the Ruhr—a region of tremendous value with its coal mines, its steel mills, its factories. It would look as though France had profited greatly by the war.

LET US LOOK AT THESE REGIONS MORE CLOSELY

Alsace-Lorraine was taken from France by Germany in 1871, and has now gone back to France.



FIG. 80. Alsace-Lorraine and The Saar. You Can Find Where This Region is by Looking at the Map of the Industries of France, Fig. 73. Find the Bend in the Rhine River. Find Briey and Saone. Thus You Can Find the Exact Location of Alsace-Lorraine in France <sup>1</sup>

When Germany took Alsace-Lorraine from France in 1871, the industrial revolution had hardly begun in Germany. Nevertheless, the German rulers unquestionably realized how valuable Lorraine iron would be to the German industries. We are not sure, but historians believe that is one reason Germany annexed that particular territory in 1871. Certainly it was a businesslike reason, was it not?

The iron deposits of Lorraine were, as these prophets foresaw, tremendously valuable to German industry. They came to supply 29 million out of 36 million tons of iron produced throughout Germany and three fourths of the raw material used in the steel mills of the country.

The French were also conscious of the importance of those iron mines, and it has been the constant desire of France to get them back. As a result of the World War she was able to do so. Lorraine iron now belongs to France.

#### FRANCE ALSO OBTAINED THE COAL FIELDS OF THE SAAR VALLEY

You will also see on Fig. 73 the great coal deposits of the Saar Valley. The coal fields in this region were given to France.

<sup>1</sup> Bowman, Isaiah: *The New World*; World Book Company, Yonkers, New York, page 82.



Fig. 81. Where the Industrial Regions of Europe Are <sup>1</sup>

<sup>1</sup> Stoddard and Frank: *The States of the War*; The Century Company, New York City.



France, as we know, needs coal, and she insisted that she receive these mines in compensation for mines in the north of France destroyed during the war.

Thus France was supplied with some of the coal she needed.

THEN, IN 1923, FRANCE TOOK POSSESSION OF THE RUHR VALLEY  
A GREAT INDUSTRIAL SECTION OF GERMANY

Do you know where the Ruhr is?

The Ruhr is the black region east of the Rhine River where you see the city of Cologne.

"Down the Rhine, below where Ceasar bridged it at Andernach, below where Yankee doughboys now wash their shirts in its green flood and British Tommies play at soccer above the bones of bishops, a small crooked stream flows in from the east—a stream called the *Ruhr*. Merely as a river this Ruhr, barely 150 miles long, is not important, but it flows through and lends its name to a tiny region not equalled anywhere for intensity of industry. . . .

"The Ruhr, as this famous region is commonly called, is merely an industrial district, smaller in area than Rhode Island, but crowded with mines and factories, from end to end, and settled in spots, with 1,800 people to the square mile.

"Tiny as it is, a mere speck on the map, it produces in normal times over 100,000,000 tons of coal a year; it mines much of the iron ore its many mills consume, and the steel wares of Solingen have been famous since the Middle Ages.

"From Essen there is trundled out, month after month, a parade of finished engines, cars, and farm implements to say nothing of tools, shafting, ship frames, bridge steel, and plates, that compete in the markets of the world from Java to Jerusalem.

"One German writer . . . figures out that the volume of raw and finished products handled in the Ruhr every working day would load a train of cars thirty miles long. . . .

"Think of the Pennsylvania coal-fields packed into this tiny area; pour in the combined populations of Philadelphia, Baltimore, Cleveland, and St. Louis. Then take a flock of the biggest American steel mills and railroad shops you can think of and set them down along the Ruhr. Fill in the new remaining smaller gaps with paper, silk, and cotton mills, glass factories, tanneries, dye, chemical, and salt works. Now put every man, woman, and child from the cities named hard at work digging coal, firing boilers,



running lathes, or rolling steel rails and you will get a graphic accurate mental picture of what this roaring rushing Ruhr really is. . . .

"Plunging suddenly into this teeming industrial field on the train ride from Cologne to Berlin, and passing through Dusseldorf, where 150 trains a day puff in and out, you are amazed at the solid procession of busy towns, at the almost solid forest of chimneys, and the pall of somber smoke that hangs over the flat, unattractive country.

"In this small but highly mineralized region, where men have dug coal, for 600 years, over 400 concerns now operate mines or hold concessions for their exploitation. . . .

"This whole Ruhr region, its myriad whistles screeching like a vast fleet lost in a fog, shrouded in smoke by day and lit by furnace flares at night, its forest of giant chimneys splitting the sky like the trunks of giant dead trees, forms a powerful picture of humming human activity.

"Workmen you see everywhere—hundreds, thousands, of them, busy as ants; and deep down in the bowels of earth, half a mile or deeper, thousands more are working, stark naked, in the stifling heat and dust of the mines, delving for the coal that all Europe needs. A distinct and clannish class these pale, short-lived miners are, an hereditary social group wherein son follows father and takes pride in his calling.

"Viewed from an airplane, the whole highly developed region, with its tangled net of waterways, railways, and train lines, forms a quaint pattern, like that the fishworms make crawling over flat mud spots after a hard rain.

"And over all the towns, always, hangs the smoke, drifting sometimes close to earth, like the fogs that roll in on San Francisco." <sup>1</sup>

This is the great industrial region which France has taken control of since the war.

IS FRANCE, THEN, BETTER OFF INDUSTRIALLY SINCE SHE WON THE WAR  
AND OBTAINED THESE VALUABLE REGIONS IN EUROPE?

As a matter of fact, France, in spite of the valuable coal and iron fields and industrial regions she has obtained as a result of the war, is not so well off as she was before the war.

How can this be true?

Because injury to one part of the modern world injures other parts.

A part of France was injured—so all of France has suffered.

Other parts of Europe were seriously injured—so France has suffered.

Let us see the ways in which France was injured.

---

<sup>1</sup> Simpich: *The Story of the Ruhr*; National Geographic, Vol XLI, May, 1922, New York, pp. 553-554.

## PARTS OF FRANCE WERE DEVASTATED

Three German armies invaded France, and an invaded country always suffers terribly.

Do you know which part of France was invaded?



FIG. 82. The Part of France Which Suffered Most in the War

Fig. 82 shows which part of France suffered most in the war. The invading army marched across this region destroying, as invading armies always do, trees and fields, mines and factories. Here the great battles of the war on the western front were fought.

What part of France is this? Have you heard of any of these towns included in this region?

Yes, this is the great industrial region of France. From this region came 60 per cent of the French pre-war coal production, and a large proportion of the iron. Here there were cotton, woollen, linen, pottery, and many other factories. Here were the sugar beet fields and the sugar factories.

And all of this industrial region upon which the rest of France depended, and which exported goods to other parts of the world, was sadly injured by war.

"Let us go back a bit. When, in October 1918, the last shells fired by the Big Berthas and the last bombs dropped by aeroplanes ceased falling on Paris, it was understood that the end was drawing near. Reports of joy thundered from all the guns of Paris on November 11, when the news of the signing of the armistice was sent to the Capital by wireless—joy

<sup>1</sup> *Literary Digest*, January 6, 1923.

mixed with too much mourning and grief to express itself in loud accents and boisterous demonstrations. Trains of succor and committees of relief were hurried to the liberated populations. . . . All the necessities of life were lacking in the districts of the North and East. . . . The task of giving comfort to the women, old men, and children, who had so long lived cut off from mother country and from civilization, was no less urgent. . . . The hard tried population were not long in recovering their balance and energy. They were eager, even before the men—the survivors of the huge conflict—could be disbanded from the army, to set to work and begin to repair the devastations.

"No one who had not lived then can realize the extent of the ruins. Large and prosperous cities like Rheims, Soisson, Peronne, Roye, and dozen of others were razed to the ground; villages reduced to a heap of debris; factories blown up, with only the foundation and uprooted steel beams left to mark the place, fruit trees sawed down at mid height; the soil so upturned by the barrage fires and trench digging, so poisoned with gas and deadly chemicals, so riddled with shell holes, so studded with unexploded shells, that it was unfit for cultivation. Where the houses were still standing, the roofs had been blown in, the windows smashed, the doors and floors taken away. When the roofs remained, the houses were robbed of everything they contained; the furniture, the carved presses and cupboards, the linen and napery once kept precious in fragrant lavender, the red copper pans and kettles that used to be the wealth and pride of the household, all pilfered. . . .

"Bread was distributed to the hungry mothers and children and blankets to wrap themselves warm, and mattresses to sleep on restfully. But a long time was to elapse before the mines could be reopened. . . The destruction of the shafts had been too scientifically done—in the last days of the war to allow any prompt repairing. The first thing that was undertaken was to put the soil into condition for cultivation again. When the women could till their gardens and the farmers plough the fields, a great step forward would have been taken.

"It took a year to fill in shell holes and remove the unexploded shells (a dangerous occupation that cost many a life). The soldiers were set to ploughing the reclaimed land of the north—wherever the raging battle had not made reclamation impossible—with steam ploughs bought in America by the government. . . In the Ardennes and Argonne, where narrow valleys lie between hills, now shorn of their woods, the farmers returned with spades, no ploughs being available. When ploughs could be procured, there were no horses."<sup>1</sup>

---

<sup>1</sup> Cestre, Charles: *France's Will to Live*; The Survey, Vol. L, June 1, 1923.



So the devastated regions of France have been largely rebuilt.

BUT THE DEVASTATION OF THE INDUSTRIAL REGIONS OF FRANCE  
WAS NOT THE WORST EFFECT OF THE WAR ON FRANCE

Houses can be rebuilt, factories started again, coal mines opened up, and fields ploughed.

But there are other results of the war that cannot be so easily mended.

FAR WORSE IN ITS EFFECT UPON FRANCE WAS THE DESTRUCTION  
OF LARGE PARTS OF EUROPE WITH WHOM SHE  
HAD FORMERLY TRADED

Before the war France had traded, buying and selling goods, with the rest of Europe. Her life had come to depend to a large extent upon her trade.

After the war the old economic life of Germany, Austria, Russia, and the rest of eastern Europe took away many of France's best customers.

For example, Germany was France's best customer for iron before the war and so France's exports of iron fell off not only during but since the war. For Germany can not buy as she did before the war.

Moreover, the transportation system in Europe, and all the arrangements for trading have broken down, and the difficulty in getting goods back and forth is tremendous.

"Let us take as an example an unharmed industrial plant in any place located in the interior of any one of several countries. We must first recollect that domestic transportation is broken down. This is substantially true of all Europe. It is literally true in many districts, but even where the service is best days and weeks are consumed in moving freight short distances.

"Then the factory must have raw materials, and in most cases these materials must come from outside the country.

"To obtain them, there must be arranged in many cases ocean transportation, and that is often hard to manage. . . .

"Suppose that the manufacturer has surmounted all the difficulties of securing raw materials. There then comes the difficulty of his market. He again faces the obstacle of broken down transportation. If his market had previously been in the Balkans, the Near East, or countries along the Eastern Front, the transportation problem is at present unsolvable."<sup>1</sup>

Thus trade, on which the life of Europe depended, is no longer possible, as it was in the days before the war.

The regions of the world have been cut apart, and they can not live successfully alone.

<sup>1</sup> Vanderlip, Frank A.: *What Happened to Europe*; Macmillan, 1919, pp. 7-8



THE BAD EFFECTS OF THE WAR ARE SHOWN IN THE DECLINE  
OF PRODUCTION IN FRANCE

For example sugar production declined rapidly during and after the war as these figures show.

In 1912-13 877,656 tons of sugar were produced

In 1918-19 109,000 tons of sugar were produced

Agricultural production of all kinds, wheat, rye, barley, oats, corn, and potatoes also declined. The wheat crop was only three-fourths as large in 1920 as in 1914.

The number of animals, cows, horses, mules, sheep, and hogs also declined. In 1920 there were only 89 per cent of the number of cows that there were in 1913.

FRANCE IMPORTS MORE GOODS THAN SHE EXPORTS

France's bad condition is also shown by the fact that she is bringing in far more goods than she sends out. She is not able to produce the goods she needs to send to other countries.

That is always a bad sign because in the end goods that are bought from other countries *must be paid for with goods that are sent out to be sold in other countries.* However, France is not now producing enough goods to pay for the goods she brings in!

Thus Has France's Production of Goods Been Lowered  
By the Bad Effects of the War

BECAUSE OF THE DESTRUCTION OF PARTS OF FRANCE  
AND PARTICULARLY BECAUSE OF THE DESTRUCTION  
OF LARGE PARTS OF EUROPE WHICH FORMERLY  
TRADED WITH HER, FRANCE FINDS HERSELF  
UNABLE TO BECOME AGAIN THE  
PROSPEROUS FRANCE OF  
PRE-WAR DAYS

---

EXERCISE

Make a list of the reasons why France might expect to be better off than she was before the war. Make a list of the reasons why she is actually worse off.

---

We Have Seen France Develop Into An Industrial Nation. She Did Not Become So Completely Industrialized As England. Therefore She Was More Self-Sufficient. Even So, She Has Been Unable to Recover Since the War Largely Because the Rest of Europe Was Ruined. No Nation Can Live To Itself. The Life of All Nations and Peoples In the Modern World Is Tied Together.

## TEST FOR SECTION X

I. Rule two columns, on a blank sheet of paper as below. In the first column, list all the reasons you can think of for which industrial nations acquire colonies. In the second, list examples from the French Empire for each reason.

Reasons for Which Industrial Nations Acquire Colonies	Examples From the French Empire

II. Check the sentences which you think best describe the desire of the French for Indo-China.

1. They wished to improve the condition of the natives.
2. They wished to make Indo-China an industrial country.
3. They wished to sell manufactured products to the people of Indo-China.
4. They wished to get raw materials from Indo-China.
5. They wished to get control of a trade route.
6. They wished to keep the English from controlling Siam.
7. They wished to get control of the agricultural products of Indo-China.

III. Write opposite the names of the regions below, words that will describe why France wanted these regions.

Alsace Lorraine.....  
 .....  
 .....  
 The Saar.....  
 .....  
 .....  
 The Ruhr.....  
 .....  
 .....  
 Upper Silesia.....  
 .....  
 .....  
 West Prussia.....  
 .....  
 .....  
 Danzig.....  
 .....  
 .....

IV. We found that the destruction of the north-eastern districts of France and the destruction of other parts of Europe had a bad effect upon France. Here is a list of some of the unfortunate things that have happened in France since the war. Mark so (✓) the ones which you think are a result of the destruction of the northeastern districts, and so (x) the ones you think are a result of the destruction of other parts of Europe.

1. The factories, mines, and farm districts were destroyed.
2. The amount of coal mined decreased.
3. The amount of iron ore exported decreased.
4. The amount of manufactured goods produced decreased.
5. Exports of goods have fallen off.
6. Raw materials are difficult to secure.
7. Manufactured goods are difficult to sell.
8. Agricultural production has declined.

#### BOOKS FROM WHICH YOU CAN GET ADDITIONAL INFORMATION ON THE GROWTH OF THE FRENCH EMPIRE

- The Burden France has Borne: *National Geographic*, Vol. 31, April, 1917; pages 323-344.
- Carpenter, Frank G.: *Africa*. American Book Company, New York, 1916.  
Morocco, pages 14-33.  
Algeria, pages 33-47.  
Tunis, pages 47-55.  
The Sahara, pages 55-80.
- Carpenter, Frank G.: *Asia*. American Book Company, New York, 1897.  
Indo-China, pages 162-170.
- Chamberlain, A. H.: *Africa*. The Macmillan Company, New York, 1917.  
Tunisia, pages 23-32.  
Algeria, pages 33-41.  
Morocco, pages 42-50.  
Sahara, pages 63-71.
- The Coasts of Corsica, *The National Geographic*, Vol. 44, September, 1923, pages 221-312.
- Huntington, Ellsworth: *Asia*, Rand McNally and Company, Chicago, 1912, Indo-China, pages, pages 284-303.
- Syria: The Land Link of History's Chain, *National Geographic*, Vol. 6, Nov., 1919, pages 437-462.
- Tahiti: A Playground of Nature, *National Geographic*, Vol. 38, October, 1920; pages 301-326.
- Timbukto: In the Sands of the Sahara, *National Geographic*, Vol. 45, January, 1924, pages 73-85.
- A Vanishing People of the South Seas, *National Geographic*, Vol. 36, October, 1919, pages 274-306.

#### HISTORIES OF FRANCE WHICH WILL BE INTERESTING TO YOU AFTER THIS STUDY

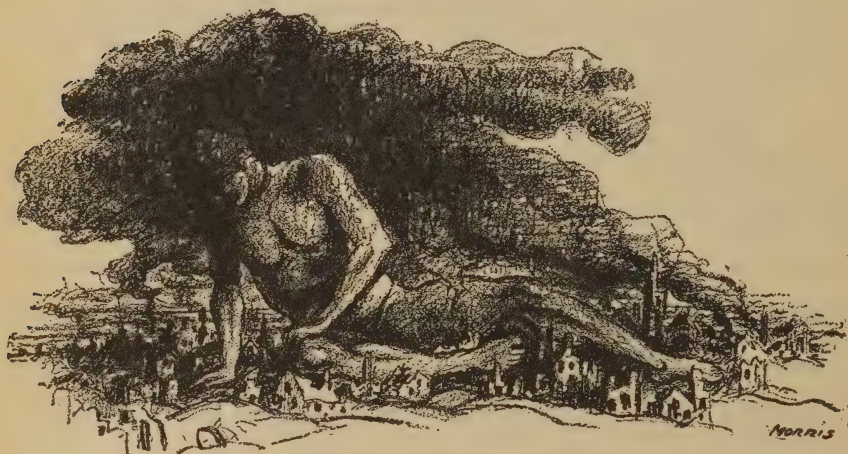
- Guerber, H. A.: *Story of Old France*, American Book Company, New York, 1910.
- Jewett, A. O.: *The Normans*, G. P. Putnam's Sons, New York, 1901. Stoneage men to 1066.
- Johnston, R. M.: *The French Revolution*, Henry Holt and Company, New York, 1909.
- Lebon, Andre: *Modern France, 1789-1895*, G. P. Putnam's Sons, New York, 1898.
- Lowell, E. J.: *The Eve of the French Revolution*, Houghton, Mifflin Co., Boston.
- Marshall, H. E.: *A History of France*, H. Doran Co., New York, 1913.
- Pitman, L. W.: *Stories of Old France*, American Book Company, New York, 1902.

## SECTION XI

### GERMANY

1870-1914: ONE OF THE GREATEST INDUSTRIAL COUNTRIES, THE PIVOT OF EUROPE'S INDUSTRIES AND TRADE, AND THE CENTER OF AN EMPIRE

1914-1924: A BROKEN NATION BECAUSE ITS TIES WITH THE REST OF THE WORLD WERE BROKEN



"In the capitol in Rome stands a marble statue, which to me, in its simple pathos seems to be one of the most beautiful. I mean the 'Dying Gaul.' Wounded to death he lies on the battlefield, his elastic body, hardened through work and combat, now relaxed toward dissolution, his head with its bristly hair lowered, his strong neck bent, his coarse, strong, working man's hand, which but lately swung the sword, now braced against the earth in a last effort to hold up his sinking body.

"He was driven to fight for gods foreign to him, gods he did not know, far from his own country. Then he met his fate. Now he lies bleeding to death—in silence. The turmoil of battle does not reach his ear any longer, the chill glance of his eyes hints that his thought is turned within his own mind; perhaps, in a last vision, he sees his childhood home village, wreathed by the forests of Gaul.



"Thus I see suffering humanity; thus I see the suffering peoples of Europe bleeding to death on the battlefield of combats which to a large extent are not their own.

"It was the greed of power, imperialism, militarism that ran amuck over the earth. The golden harvests of the fields were trampled under iron feet; the soil lies devastated to the right and left. Society creaks in its joints. But the peoples bend their heads in silent hopelessness. The shrill battle cries still make uproar around them, but they hardly notice them any longer. . . The soul of the world is sick unto death. Courage is broken. Ideals are faded." <sup>1</sup>

---

Such is Europe after the terrible war which wrecked the continent, devastated its fields, broke down its industries, and destroyed its trade.

And of all the countries of Europe, Germany, formerly a powerful industrial country—has been one of the greatest sufferers. She was one of the greatest sufferers *because her life depended so completely on manufacturing and trade* and because the breaking off of her connections with other parts of the world destroyed her.

#### Berlin at Christmas time, 1923

An Englishman, writing from Berlin on Christmas Day, 1923, said:

"Berlin is enjoying a spell of fine cold weather, the kind of weather one associates with Christmas, or at any rate with Christmas cards. A light carpet of snow makes the streets look bright and transforms the Tiergarten into a fairyland. The branches of the trees are strangely still; yet, though snow-draped, the delicate tracery of their higher boughs stands out distinct and lustrous on the background of an opalescent sky. Below, black tree trunks border snowy vistas leading to white and silent spaces; here one forgets the nearness of the city where dwells so much despair. For Berlin is a city of despair in spite of the sunshine and attempts at Christmas jollity, in spite of the flaunted luxury of profiteers. . .

" . . . The occupation of the Ruhr and the general international situation are rapidly ruining German industry. Although wages are low—a first-class workman earns about \$6 for a forty-eight hour week . . . the cost of manufacture has risen, articles which a few months back were sold for a quarter of the British price are now more expensive in Berlin than they are in London. As a consequence Germany's export trade is diminishing and will soon reach the vanishing point. . No longer are cheap German goods obtainable, and no longer can Germany procure with them the raw material needed for her industry. A period of stagnation has set in whose

---

<sup>1</sup> Nansen, F.: Europe and the Hope of Peace, *Our World*, Vol. 3, Sept., 1923; pp. 10-11.

consequences are too horrible to contemplate, unemployment is increasing by leaps and bounds. The latest figures show five million unemployed or short-time workers. . . .

"For the moment the working classes throughout Germany are beaten to their knees; the spectre of want haunts their homes; they are exhausted both morally and physically; millions of city dwellers have lost their nerve through insufficient nourishment. Two or three years must pass before the national character can assert itself; today, one bomb dropped in Berlin would cause a panic."<sup>1</sup>

### GERMANY WAS A POWERFUL INDUSTRIAL NATION BEFORE THE WAR

Such is Germany today. But to understand the story we must go back and see her when she was one of the most powerful industrial nations in the world.



FIG. 83. Germany as She Was from 1870 to 1914

<sup>1</sup> Thomson, C. B.: A New Franco German War, *The Nation*, Vol. 118, January 30, 1924; pp. 109-110.

*Literary Digest*, New York, August 15, 1914.

## WHAT DO YOU THINK OF GERMANY'S LOCATION?

Compare Fig. 83 and Fig. 50, the trade map of the world.

Is Germany as well located as France for carrying on trade by sea?

Measure her coast line and compare it with that of France. Which is the longer?

Does she have outlets on as many bodies of water? Can her ships go in and out of her ports with little chance of interference as French and English ships can from their ports? If a ship leaves Bremen or Hamburg what route will it have to take to reach the Atlantic? If a ship leaves Danzig, what route will it have to take to reach the Atlantic?

PERHAPS THE LOCATION OF GERMANY PARTLY EXPLAINS  
THE FACT THAT SHE DEVELOPED LATER THAN  
FRANCE OR ENGLAND

While England and France were leaving the middle ages behind, while they were becoming modern industrial countries and building up great overseas empires from 1775 to 1850, Germany was just a group of little quarrelling kingdoms. There was no central government. The serfs lived on manors in little houses grouped around the castles of the kings and nobles.

ANOTHER REASON WHY GERMANY DEVELOPED LATE:  
MANY WARS TORE THE GERMAN STATES

During the terrible Thirty Years' War, 1618-1648, the German countryside was laid bare, and, some historians say, two-thirds of the people of the German kingdoms were killed.

This war and others that came later, further delayed the development of Germany.

Even in the 1800s Germany Was Much Like She Was  
In the Middle Ages

We found that by 1825 England was becoming a manufacturing nation, and that France was starting on the same road.

What about Germany?

She was still a country living by primitive agriculture—the one-field agriculture of the Middle Ages. Each holding consisted of strips of land scattered over the countryside. The men who worked the fields were still largely serfs, although a movement had started in the late 1700s and continued clear up through the 1800s to free them. So, during the 1800s, more and more of the serfs became free peasants. However, it was not until the early 1900s that serfdom was entirely ended in Germany!



In 1850, many of the farmers were still serfs, tied to the land and forced to give the landlord services and agricultural products.

Travellers in the German kingdoms in the period 1820-1840 tell of the primitive methods of agriculture, of the open fields laid out in strips, of the crude implements, and of the ignorance of the peasants concerning the newer methods of farming.

#### THE TOWNS OF GERMANY WERE SMALL AND UNIMPORTANT

In 1815 the combined population of the twelve towns of Germany that were largest in 1914 was only 750,000. In the same year Paris alone had a population of 500,000 and there were in France other important cities. You can see from this fact how much more a land of towns and cities France was than Germany.

In 1850 these same twelve towns contained only 1,340,000 people while Paris alone contained more than 1,000,000. In 1852, 71.5% of the people of Germany lived in country districts.

"The towns managed to grow just a fraction quicker than the population as a whole. Very many of them were still the quiet little places of the fairy books, with huddled roofs and spires, from which the view over the ploughlands and the orchards was so easy."

#### THE MAKING OF GOOD ROADS AND BUYING AND SELLING WERE CARRIED ON IN THE OLD-FASHIONED WAY

In 1850 industries such as spinning and weaving, furniture making, and so on, were still hand industries. Linen, woolen, and cotton goods were woven in the homes of the people. The making of furniture, cutlery, and other goods was carried on in the homes of craftsmen, as it had been done in the Middle Ages.

"Even the trader with a shop was not too common in the Germany of the 1840s. In most places there were no shops except the workshops of the handicraftmen, tailors, cobblers, carpenters, and the rest. If the consumer wanted what they could not make, he must buy from a peddler or at his local yearly market. Townsman and peasant met weekly at the ordinary market, to buy and sell food; and so the average town lived on local produce. Few were large enough to need supplies from a distance. But for anything unusual both townsman and peasant had to wait. Spices and condiments, materials for clothes, furniture, tools and implements at all out of the common run, toys and little luxuries, were brought by wandering traders—grading upwards from the peddler to what might almost be called the merchant—to the yearly market. It was a great occasion. There were puppet shows and rope dancers and 'English riders.' The peasants poured



in to make their little purchases; the squires and townsfolk in their stores. There would be selling, too, by the local people—cattle, perhaps, if the yearly market was also a cattle market, or flax and other industrial crops, if the district grew a surplus of these things.”<sup>1</sup>

#### THEN CAME THE RAILROADS

So Germany was living on farms and in little towns in the early 1800s. The roads were bad. There was not a great deal of travel.

Then a number of men saw the tremendous advantage that railroads would be to the disconnected communities of Germany, and in the 1840s the railroad building period began. Once begun, railroad building continued rapidly.

In Prussia, the largest German Kingdom, there were:

500 miles of railway in 1844
1500 miles of railway in 1848
3500 miles of railway in 1860

“The revolutionary effects of the railway on a country such as Germany was in the early nineteenth century, need little emphasis. . . . Treitschke’s saying that the railway changed the whole face of the land was certainly true by the end of the forties. In a country whose road system was still new and very imperfect, and whose towns were almost without exception small and half rural; its revolutionary influence was far more conspicuous than in older and more urbanized lands. There was something American about it.”<sup>2</sup>

As a result of the building of railroads, German industries took a long step forward. Between 1850 and 1870 both the coal and iron industries developed steadily.

Pig iron production grew from 400,000 tons in 1850 to 1,400,000 tons in 1870.

Coal production shot up even more rapidly. In 1830 very little coal was being mined in all Germany. In 1870, 34,000,000 tons were taken out of the mines of the country.

Germany had passed France in the production of both coal and iron by 1870!

But she was still far behind England. She was not yet an industrial nation. Changes had come slowly. She still lived largely by agriculture.

<sup>1</sup> Clapham, J. H.: *The Economic Development of France and Germany, 1815-1914*; p. 117.

<sup>2</sup> *Ibid.* p. 155.

IN 1871 A NEW PERIOD IN GERMAN HISTORY BEGAN.  
GERMANY CHANGED FROM A BACKWARD GROUP OF  
LITTLE QUARRERING STATES TO A POWERFUL  
INDUSTRIAL NATION

Prussia, the largest of the German Kingdoms, had for a long time been trying to unite the many little German kingdoms.

In 1871 she achieved this long desired end. She led the German kingdoms into a war against France. Alsace-Lorraine was then taken, as we told you in the section on France, from the defeated foe. The twenty-four little German states were united and the Prussian king was crowned Emperor of Germany.

Germany had started on her great period. From this time on she developed more rapidly than any country had done before.

GERMANY'S LOCATION WAS NOW FAVORABLE IN MANY  
WAYS FOR HER DEVELOPMENT

Look at the map of Germany as she was, 1870-1914, Fig. 83, and see whether she seemed to have any particular advantage of location.

How many other countries did she touch? Did she touch more or fewer countries than did other European nations?

Therein lay one of the great advantages of Germany's position. She was right in the center of Europe, easily reached by land from the other countries of the continent. She could trade easily by land with Russia, Austria-Hungary, Italy, Switzerland, France, Belgium, and Holland.

But what had made the difference? Why was her close connection with other countries by land more important than it had been a hundred years ago?

What changes had taken place in transportation which made land transportation as important as water transportation?

MAP EXERCISE

1. On an outline map of Europe (a) draw the outline of Germany as it was in 1914; (b) write in at the proper places the names of other countries bordering on Germany.
2. Exchange maps with a neighbor. Correct his map, writing on the left margin the name of each country which is incorrectly located. Return your neighbor's map and receive your own.
3. Learn the location of the boundaries and the countries surrounding Germany. Try to follow these steps:

*First:* Compare your work with the correct location on a geography map. Note exactly wherein your work is wrong.

- Second:* Close your eyes and try to see in your minds a correct picture of each location that you missed.
- Third:* Study the geography map again to see if the picture in your mind was correct.
- Fourth:* If not, study the map carefully, then close your eyes and try to picture to yourself the exact location. Repeat this process until you can picture correctly each location that you missed.
- Fifth:* On a clean map repeat the test, exchanging papers again with your neighbor correcting his test and having him correct yours.
- 

BETWEEN 1870 AND 1914 GERMAN AGRICULTURE DEVELOPED,  
BUT BECAUSE OF THE GROWING INDUSTRIAL POPULATION  
GERMANY WAS FORCED TO BUY FOOD ABROAD

Thus she became a food importing instead of a food  
exporting country

There are landlords and farm laborers in England. There are small peasant farmers in France.

What kind of farmers do we find in Germany?

The German system comes half way between one and the other. For in Germany there are two kinds of farmers.

### The Peasant Farmers Live in the South and West

In the west and south of Germany—the regions nearest France—we find peasant agriculture, in many ways like the peasant agriculture of France.

There is Bavaria, for example. (Find Bavaria on the map of Germany.) This province is one of the most important farming regions of Germany. And the farming in Bavaria is peasant farming.

In 1914 half the land of Bavaria was divided into holdings of from  $12\frac{1}{2}$  to 50 acres. About a third was divided into holdings of from 50 to 250 acres. What proportion of the agricultural lands of Bavaria was divided into farms of from  $12\frac{1}{2}$  to 250 acres? How do these peasant farms compare in size with the farms of France?

Thus Bavaria and the other agricultural regions in western Germany were full of peasant farms, some very small, some quite large, but still not huge tracts of land such as the English landowners possess.





**FIG. 84. Women of Bavaria are Doing the Hard Dairy Work in the Mountains.**  
 They Wear Trousers While in the Mountains, Donning Women's  
 Clothes Only When They Leave for the Valleys With  
 the Cattle in the Autumn <sup>1</sup>



**FIG. 85. Dairy Women of the Bavarian Alps.**  
 These Bavarians Take Their Cattle up the Mountains in the Summer  
 Time, and Stay Until Winter When They Go Down Into  
 the Valleys <sup>1</sup>

<sup>1</sup> Brown Brothers, New York City.



Often the peasants with small plots of ground, perhaps 5 acres, work part time for the peasants with larger tracts of ground. But in Bavaria as in other peasant regions such as France, there are few farm laborers such as we find on English estates.



FIG. 86. A Bavarian Peasant of the Mountains and His Method of Transportation. This Picture Shows What Primitive Methods are Often Used in Peasant Countries<sup>1</sup>

### In the North and East the "Junkers" Own Large Estates

The farms of northern and eastern Germany are very different from the farms of the south and west. Here we find great *landlords*, called *squires* or *junkers*, holding perhaps two or three thousand acres of land each.

This system is in many ways like the English system. The Junkers live on their great farms, and hire laborers to work for them. Some laborers they hire regularly; others they bring in at the busy seasons—planting or harvesting time. As German industries grew and drew the German people to them, the junkers came to rely upon gangs of Polish, Austrian, or Russian laborers who came and lived in shacks on the 'junkers' land during the busy season.

The land in the north and east of Germany was largely taken up by these big estates. In Mecklenburg, for example (can you find this region

<sup>1</sup> Brown Brothers, New York City.



FIG. 87. Weeding the Radish Beds on a German Farm<sup>1</sup>

on your wall map?) sixty per cent of the agricultural land was divided into holdings of 250 acres or more. How does the size of the Mecklenburg farms differ from the size of the Bavarian farms?

Large crops were raised on these great estates, and the products were sold in the cities or shipped out to other countries.

#### What Crops Are Raised On German Farms?

What is the most important grain raised in France? What is the grain of which French bread is made?

Look ahead at the map of the wheat-growing districts of Europe and see whether Germany is an important wheat-raising country in the same way France is.

No—wheat is not Germany's big grain crop.

Have you ever heard what kind of bread is used widely in Germany? Rye bread.

And rye is the great grain crop of Germany.

---

<sup>1</sup> Brown Brothers, New York City.



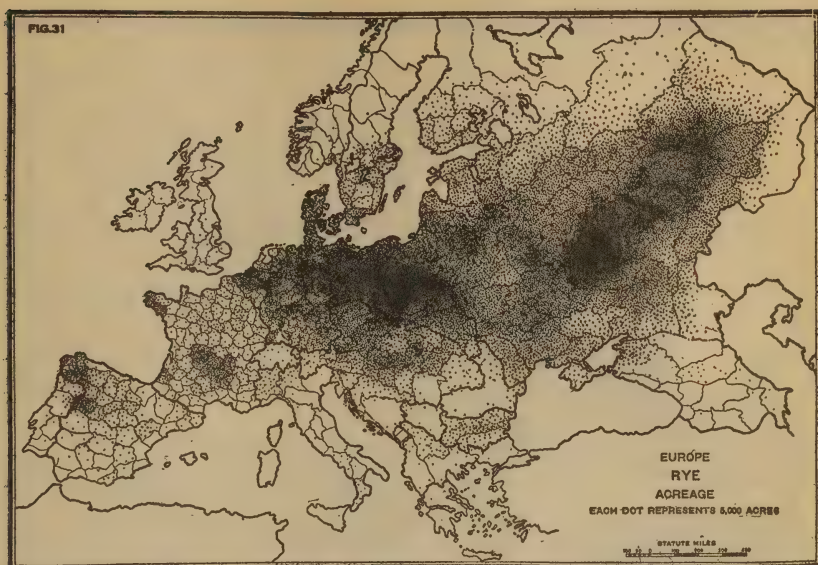


FIG. 88. Where Rye is Grown in Europe<sup>1</sup>

Look at Fig. 88, the map of the rye-growing districts of Europe.

What other countries beside Germany grow large quantities of rye?

Wheat, barley, and oats, while not as important as rye, are also grown in Germany.

#### Two Other Important Agricultural Products:

Sugar, beets and potatoes

Do you remember the sugar beets and potatoes of France?

These two important food crops are even more important in Germany than in France.

Look back at the map of the sugar beet regions of the world, Fig. 71, and see for yourself whether Germany raises sugar beets.

Now look at the map of the potato growing regions of Europe.

How very black Germany is in comparison with the rest of Europe!

In 1913 Germany grew one-third of all the potatoes grown in the world! And the weight of the potatoes grown was nearly twice that of all other German crops.

You wouldn't believe that a little spot like Germany could grow such a big crop, would you?

<sup>1</sup> Finch and Baker: *Geography of the World's Agriculture*, U. S. Department of Agriculture; 1917; p. 28.

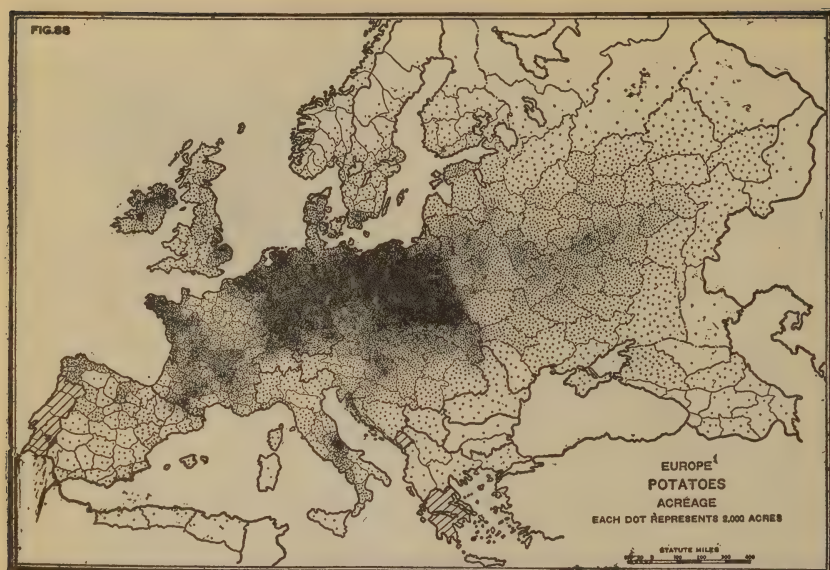


FIG. 89. Where Potatoes are Grown in Europe <sup>1</sup>

THE NUMBER OF PEOPLE LIVING ON FARMS DECREASED VERY SLIGHTLY AFTER 1870, WHILE THE AMOUNT OF LAND CULTIVATED AND THE AMOUNT OF AGRICULTURAL PRODUCTS RAISED INCREASED

We shall see later how the industries of Germany grew after 1870.

This meant that there must be more and more people to work in the coal mines, iron mines, and factories of Germany.

Of course, many people left the farms to work in the cities.

But as a whole the rural population of Germany decreased only slightly during this period.

The whole population increased rapidly,—about 24,000,000, or one and one-half times, between 1871 and 1910. These extra twenty-four million people supplied the workers for the industries of Germany.

Thus the per cent of people living in the agricultural districts decreased greatly, but the *actual number* decreased only slightly.

These figures tell the story:

Year	Population of Germany	Percent in Rural Districts	Percent in Towns and Cities
1871	41,059,000	63.9	36.1
1910	64,926,000	40.0	60.0

<sup>1</sup> Finch and Baker: *Geography of the World's Agriculture*, U. S. Department of Agriculture; 1917; p. 70.



How do the population changes in Germany compare with the changes in England and France? Did the number of people living in rural districts change more or less in France and England than in Germany?

GERMAN AGRICULTURAL METHODS WERE SO EFFICIENT THAT  
THE SLIGHT DECREASE IN POPULATION DID NOT PREVENT  
AN INCREASE IN THE AGRICULTURAL PRODUCTS RAISED

After 1850 German farmers had little to learn from the farmers of any other country. The large estates owned by the junkers in the north and east of Germany were models of farming. The latest methods of fertilizing the land and of raising the crops were used. The amount of land under cultivation increased during this period, and practically all of the crops increased.



FIG. 90. This picture shows how every bit of ground which it is possible to use is under cultivation in Germany. The terraced hillsides are used for growing grapes. The picture shows another interesting fact—the way in which the towns grew up at the foot of the old castles built in the Middle Ages<sup>1</sup>

For example, the amount of the grains raised increased

Year	Wheat Average Number of Tons Raised Each Year	Rye Average Number of Tons Raised Each Year	Barley Average Number of Tons Raised Each Year	Oats Average Number of Tons Raised Each Year
1900-1904	3,900,000	9,660,000	3,120,000	6,950,000
1911-1912	4,210,000	11,230,000	3,320,000	8,110,000

<sup>1</sup> Brown Brothers, New York City.

The increase in the amount of sugar beets raised is even more startling

Year	Average Number of Tons of Beets Turned Into Sugar Each Year
1866-1870	2,500,000
1886-1890	8,722,000
1906-1910	13,423,000

How many times did the amount of sugar beets raised for the making of sugar increase between 1866 and 1910?

Not only did the German crops increase, but the amount of live stock—horses, cattle, pigs, and goats, increased. Only the number of sheep declined. This table shows the facts:

	Horses	Cattle	Sheep	Pigs	Goats
1873	3,300,000	15,800,000	25,000,000	7,100,000	2,300,000
1912	4,500,000	20,200,000	5,800,000	21,900,000	3,400,000

How many times did the number of horses, cattle, pigs, and goats increase? How many times as many sheep were there in 1873 as in 1912?



FIG. 91. This Picture Shows That Sheep are Still Raised in Germany and Brought to Town to be Sold <sup>1</sup>

<sup>1</sup> Brown Brothers, New York City.



ALTHOUGH THE AGRICULTURAL PRODUCTS INCREASED, THE  
NUMBER OF PEOPLE IN GERMANY INCREASED SO GREATLY  
THAT MORE AND MORE FOOD HAD TO BE BROUGHT  
IN FROM OTHER COUNTRIES TO FEED THE  
GROWING POPULATION

In the days before 1870 when Germany was primarily an agricultural country she was able to feed her own people, and still ship out goods to feed the people of other countries.

Then things changed.

The number of people in Germany grew with tremendous rapidity—one and one-half times between 1871 and 1910. These people had to be fed. And the increase in crops could not take care of the increased population.

Therefore, between 1871 and 1880, Germany ceased to be a food-exporting country.

In 1877 the country imported nearly two million tons of Russian rye, oats, and barley.

Between 1895 and 1900 Germany was able to supply only 73.7 per cent of the rye she needed, and 73.7 per cent of the wheat she needed. The rest of the rye and wheat used in the country had to be brought in from the outside—chiefly from Russia.

In addition Germany had to import cattle, beef, bacon, milk and cream, butter, lard, suet, and meat.

Before the great war of 1914-1918 Germany was able to supply only about 85 per cent of the food she needed. The other 15 per cent she had to import.

Was Germany more nearly able to supply her own food than England? Than France?

We Have Found That Germany's Agriculture Became More  
Productive After 1870. Nevertheless the Increase in  
Agricultural Products Did Not Keep Up With the  
Increase In Population, and Germany Was  
Forced to Import Food

#### EXERCISE

Look up in some reference book such as the *Statesman's Yearbook* or the *World Almanac*, the amount of each of the chief food products imported into Germany in 1913. Were there any food exports?

Meanwhile the Industries of Germany Were Growing  
At a Tremendous Rate

England grew to be an almost completely industrial country *because of her supplies of coal and iron*. France remained only partly industrialized, *largely because she lacked coal*.

What about Germany?



FIG. 92. This Map Shows Where the Coal of Germany is Located



FIG. 93. This Map Shows Where the Iron of Germany is Located



Does Germany seem to have large amounts of coal and iron in comparison with the rest of Europe?

As a matter of fact she has. Her vast and rich coal and iron fields were the basis of the tremendous industrial civilization which she built up between 1871 and 1914.

### The Three Important Coal Fields of Germany: The Ruhr, the Saar and Upper Silesia

Where are the coal and iron fields of Germany?

Look at the map of the coal fields. Which field seems to be the most important?

It stands out clearly—*the Ruhr*. From this field came 60 per cent of all the soft coal produced in Germany in 1913.

From the *Upper Silesian* fields came 23 per cent of the coal mined in that year. The Silesian fields are said to be so vast that they contain *more coal than all the coal fields of the United Kingdom!*

The third important coal field is *the Saar* from which came 9 per cent of all the soft coal produced in Germany in 1913.

The coal fields of Saxony supplied the foundries and factories of Saxony, but did not ship out coal to other parts of Germany or to other parts of the world.

### The Great Lorraine Iron Field

Now look at the map of the iron districts. Which seems to be the most important?

Yes, the Lorraine field which Germany took from France in 1871 and which France took back from Germany in 1918 was by far the most important iron field of Germany between 1871 and 1913.

Then you see there are important iron fields near Cologne. Is there coal in that region?

Now perhaps you understand why *the Ruhr* is so important, why Germany's industrial life centers there, and why France wanted to take possession of the district. When coal and iron are found together, you can be sure that the district in which they are found will be of great importance.

There is a little iron production in other parts of Germany.

### MAP EXERCISE

- I. On an outline map of Germany shade in with one kind of shading the regions where there is coal and with another kind of shading the regions where there is iron.

2. Exchange maps with a neighbor. Correct his map, writing on the left margin the name of each region which is incorrectly located. Return your neighbor's map and receive your own.
3. Learn the location of each region that you missed. Try to follow these steps:

*First:* Compare your work with the correct location on a geography map. Note exactly wherein your work is wrong.

*Second:* Close your eyes and try to see in your mind a correct picture of each location that you missed.

*Third:* Study the geography map again to see if the picture in your mind was correct.

*Fourth:* If not, study the map carefully, then close your eyes and try to picture to yourself the exact location. Repeat this process until you can picture correctly each location that you missed.

*Fifth:* On a clean map repeat the test, exchanging papers again with your neighbor correcting his test and having him correct yours.

COAL PRODUCTION 1870-1913

Year	Tons
1870	34,000,000
1900	150,000,000
1913	279,000,000

Was the coal industry of Germany, which had gotten under way so much later than that of the United Kingdom rapidly catching up with its rival? Turn back to the sections on England and find out what her coal production was in 1913.

The German iron production had not only reached that of the United Kingdom by 1913, but had passed it.

Although this industry was not entirely new in 1871, it is said that more new concerns for iron smelting, iron working, and engineering were started in Prussia (which was the largest state that went into the making of Germany) during the years 1871-1874 than during all the previous years of the century.

IRON PRODUCTION 1875-1910

The production of pig iron in all of Germany increased as follows:

Year	Tons
1875	3,000,000
1880	2,729,000
1910	14,794,000

As steel became more important, Germany produced vast quantities of this material of which bridges, machines, railroads, steamships, and cities are made.

Year	Tons of Steel Produced
1880	1,548,000
1910	13,149,000

*Germany has become the second greatest iron and steel producing country in the world. Do you know which was the first?*

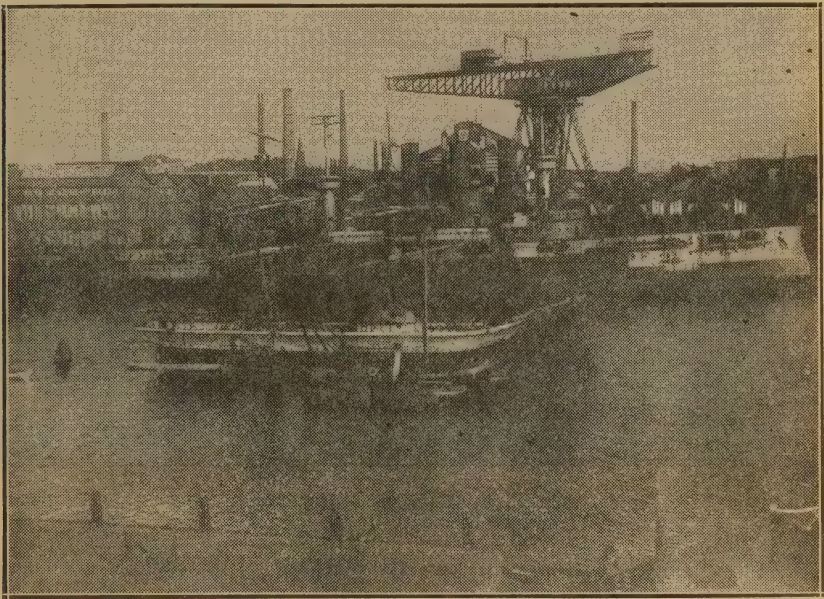


FIG. 94. The Krupp Works for the Production of Steel Goods at Kiel <sup>1</sup>

GERMANY'S IRON AND STEEL INDUSTRIES ENABLED HER TO  
INTRODUCE THE BEST MACHINERY IN ALL HER OTHER  
INDUSTRIES AND THUS TO INCREASE PRODUCTION

While France held back from the new machinery and clung to her old methods of production, German inventors and scientists were working out new types of machines and the most efficient methods of production. And the German owners of factories were introducing these newer, more efficient machines and methods.

<sup>1</sup> Brown Brothers, New York City.



In the new Germany old industries were changing and new industries were growing up. The German woollen and silk industries, her chemical industries, her electrical industries for the construction of electrical dynamos, cables, and other electrical equipment, were all growing tremendously and becoming among the most important, and in many cases the most important, of their kind in the world.

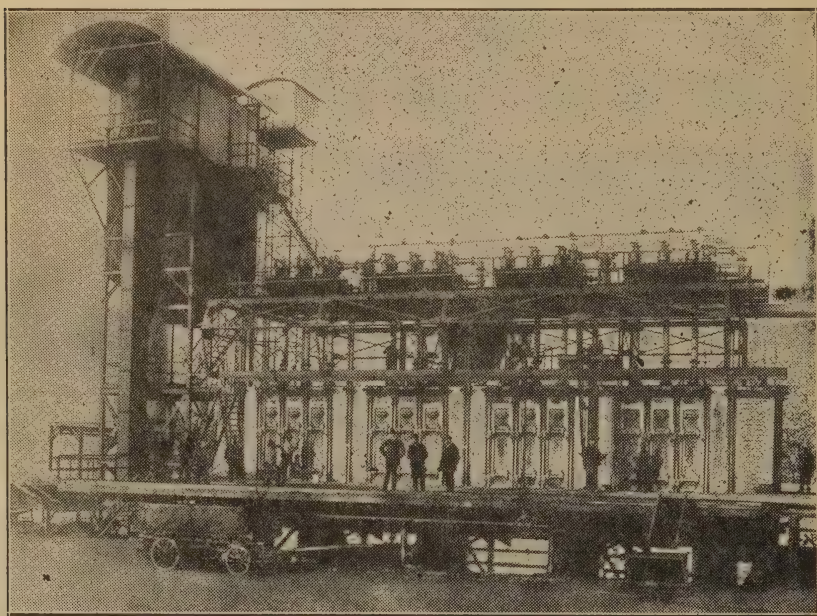


FIG. 95. A Typical Coke Plant Which is Constructed to Save the By-Products.  
An Instance of German Efficiency in the Use of Modern Methods <sup>1</sup>

The rapidity with which the old methods of producing goods were dropped in Germany is shown by this table which gives the number of power and hand looms in the silk and velvet industry between 1890 and 1909.

SILK AND VELVET LOOMS AT KREFELD, GERMANY

Year	Power Looms	Hand Looms
1890	5,400	22,500
1900	9,700	7,200
1905	9,400	3,700
1909	9,900	2,700

Notice how rapidly the hand looms went out of use.

Hand industries did not disappear entirely in Germany. In the making

<sup>1</sup> Brown Brothers, New York City.



of certain articles such as fine cutlery, baskets, pottery, and so on, the hand system still existed.

However, in most industries modern machines took the place of the old-fashioned craftsman.



Fig. 96. An Example of Hand Work Which Did Not Die Out. This Man Is Planing Split Wickers—Perhaps for Furniture <sup>1</sup>

Germany Had Developed Within a Few Years Into a Modern Industrial Nation and Was Rapidly Overtaking England in Industrial Importance

---

#### EXERCISE

(1) On the blackboard write a list of the reasons why German industries developed so late. Which do you think the most important reasons? Why?

(2) Write on the blackboard a list of the reasons why German industries developed so rapidly once they started. Which are the most important reasons? Why?

---

<sup>1</sup> Brown Brothers, New York City.

DURING THIS PERIOD AN EXCELLENT TRANSPORTATION  
SYSTEM WAS BUILT UP WITHIN GERMANY CON-  
NECTING THE GROWING INDUSTRIAL CENTERS  
AND INDUSTRIAL DISTRICTS WITH  
AGRICULTURAL DISTRICTS

We have found in our study of other countries the close connection which exists between the growth of industries, the growth of railway and water transportation systems, and the growth of cities.

Railroads and canals are built to carry goods and people back and forth. Because of them industries and cities can continue to grow, and as a result of this growth of industries and cities, more and more railways and waterways are made.

Many Railway Lines Were Built

We have seen that railways built after 1840 helped start the industrial development of Germany.

Between 1865 and 1875 the main railroad lines were completed. Look back at Fig. 76 the map of the European railway lines and notice the railways of Germany.

Where do they center? Is Germany well supplied with railways?

Today Germany—a good deal smaller than the Germany of 1914—has 35,677 miles of railway.

How does the length of railways in Germany compare with  
that of France?

Yet Germany is smaller today than France

We have said that railways grow up with industries. Many trains are necessary if coal and iron and machines and other manufactured products are to be taken out of the industrial regions and if food is to be taken in to feed the town workers. And since Germany was a more highly industrialized country than France more railway lines were built.

CANALS AND RIVERS PROVIDED AN IMPORTANT MEANS  
OF TRANSPORTATION IN GERMANY

Even by 1870 many canals had been built to link up the rivers of Germany, and to make possible the transportation of goods by water throughout the country. The deepening of river beds so that large ships could go far up the rivers and the building of canals continued, until by 1914 Germany had five times as many miles of canals as France and twice as many miles of navigable rivers.





FIG. 97. Frankfurt on the Main. Notice the Barges and Boats Which Carry Goods Up and Down the River <sup>1</sup>

A TRAVELLER DESCRIBES TRANSPORTATION ON THE  
RUHR AND THE RHINE RIVERS

"The Ruhr River . . . rises on the north side of Winterberg . . . flows northward past the romantically situated town of Arnsburg, and thence winds on down into the mining district around Hagen. Here . . . it twists on past Witten, Steele, Kettwig, and Mulheim, getting greasier and blacker as it washes past coal dumps and foundries, till it joins the Rhine. . .

"From Witten to its mouth, some 43 miles, the Ruhr is navigable, with the aid of a dozen locks, but low water often delays the boats. Here and there, along its busy course, it even finds time to pause and turn the wheels of little mills and factories. Down the Rhine the trade of the Ruhr runs out to sea.

"Here water traffic fairly crowds the stream. Boats are everywhere as thick as Chinese junks and sampans at Canton or Newchwang. But there is no jamming, ramming, shouting and battling with oars or poles, as among the boatmen of the East. Here are semaphores, signal orders, order. Hundreds of boats are handled a day, with the same precision and speed that we handle trains at a great American union station.

At Duisburg-Ruhrort you can see scores of boats berthed side by side, as box cars are parked in the railway yards at Chicago. Here is one of the world's greatest river harbors, a solid line of wharf five miles long.

<sup>1</sup> Brown Brothers, New York City.

"This Rhine, this artery of Europe, this *Rhenus Superbus* as the Romans named it when they built Cologne, how few Americans realize what it means to western Europe! From the Alps to the sea, from Lake Constance to Rotterdam, the village of herrings;—this swift stream green and shallow, tumbles along; into its foaming waters are crowded over twenty thousand steamers, tugs, and barges—a tonnage of nearly five millions.

"And up the Ruhr and down the Ruhr, in ceaseless procession move hundreds of light draft boats and barges carrying coal, ore, building materials, and manufactured products.

"From Cologne to London, too, by way of the Rhine and serving the Ruhr frontier, runs a regular line of specially built river-sea steamers, which do away with the cost of unloading and reloading from river barges to ocean steamer, or vice versa, at Rotterdam."<sup>1</sup>

AS INDUSTRIES GREW AND THE TRANSPORTATION SYSTEM  
DEVELOPED, THE POPULATION OF GERMANY INCREASED  
RAPIDLY AND GREAT INDUSTRIAL CITIES GREW UP

How much did the population of Germany increase between 1870 and 1913?

Where did all these extra people—the twenty-four million more living in Germany in 1913 than in 1870—go to live? To the country or to the city?

Where do the greatest number of people live in Germany?

Does the band of heavy population continue beyond Germany to other countries? Does it seem to have any connection with the coal and iron regions of Germany? Show how.

People Crowd Together in Coal Mining Districts

As a matter of fact this heavy band follows a line of tremendous coal deposits which are at many places mixed with iron deposits.

Along that band swarm millions of people—little ants who dig coal and who make iron and steel and machinery and many kinds of machine products. It is one of the busiest swarms of people on earth. Along this band are many of the great industrial cities of Europe.

Germany herself has many cities—cities around coal mines, steel cities, cities of factories, port cities. Of these, 43 have a population of over 100,000!

How does this number compare with the number of cities of the same size in France? In England?

Without looking it up, how does it compare with the United States?

<sup>1</sup> Simpich, Frederick: The Story of the Ruhr, *National Geographic Magazine*, Vol. XLI, May, 1922; pp. 559-561.



## THE RISE OF ESSEN, A STEEL TOWN ON THE RUHR

"Though founded away back in the ninth century (800s) Essen slumbered along for hundreds of years, an obscure, unimportant hamlet. Even *as late as 1850 it had hardly more than 10,000 people*. Then the Krupp boom—the rise of the greatest machine-shop the world has ever seen—struck it, and *today the city houses half a million*.

FIG. 98. The Krupp Works at Essen <sup>1</sup>

"Set in the heart of the coal-fields, crowded with endless industrial plants whose tall chimneys belch eternal smoke and fumes, the great workshop fairly throbs with power and energy. The roar and rattle of ceaseless wheels and din of giant hammers pounding on metal seem to keep the whole town atremble.

"Here every form of iron and steel article is made, from boys' skates to giant marine engine shafts. Curiously enough, even some of the smoke, or the fumes from the smokestacks, is caught and converted into a gas that furnishes more power to run the mills. . . .

"More than a hundred years ago the first Krupp set up his small, crude shop and began to make by hand the tools, the drills and chisels, used by tanners, blacksmiths, and carpenters along the Ruhr and Rhine. He also made dies for use in the mint of the government. Within 30 years, due to the old ambition for expansion, Krupp tools were known and used as far away as Greece and India.

"Here, about this time also, spoons were first rolled from one solid block of metal by an odd-looking machine invented for that purpose.

"Then came the great era of mass production in steam engines, hammers, steel tires for railway cars, cast-steel shafts for river and ocean steamers, and finally the astonishing output of guns and armor plate which brought the militaristic nations of the world to buy at Essen."

"The daily roar of artillery at the proving grounds, where each new

<sup>1</sup> Brown Brothers, New York City.

gun was tested, added to the din of whistles, rushing trains, and rattling gears, made pre-war Ruhr probably the noisiest place on earth.

"It is noisy enough now, but the great guns are silent; Krupp makes them no more. The big lathes that once made guns for every nation, from Chile to China, now turn out shafting for marine and other engines. Box-cars for Belgium, car wheels for South America, and whole tram-line systems for the Dutch East Indies were some of the orders being filled when I saw these giant works a few months ago.

"You can picture the size and scope of this colossal plant when I tell you that, literally the coal and iron come in at one end of the flock of factories and emerge at the other in the form of finished locomotives, with steam up for testing, or as plows, all painted and ready for the farm, or as the finest nickeled instruments and tools.

"But, amid all this mad drama of frenzied production, nothing can compare, in sheer human interest and excitement, with the adventurous life of the masked men who battle with red hot iron in the heat, fumes, and dust of the furnaces and mills. . . .

"Think of one block of red-hot metal weighing 85 tons tossed about with cranes and hooks like baggage on a dock! Then from between giant rollers, with a deafening boom and a hiss like cannon fire, the long rails and strips shoot out white hot and crawling like fiery serpents. Let a workman but stumble then, or take a single false step, and he pays with his life."<sup>1</sup>

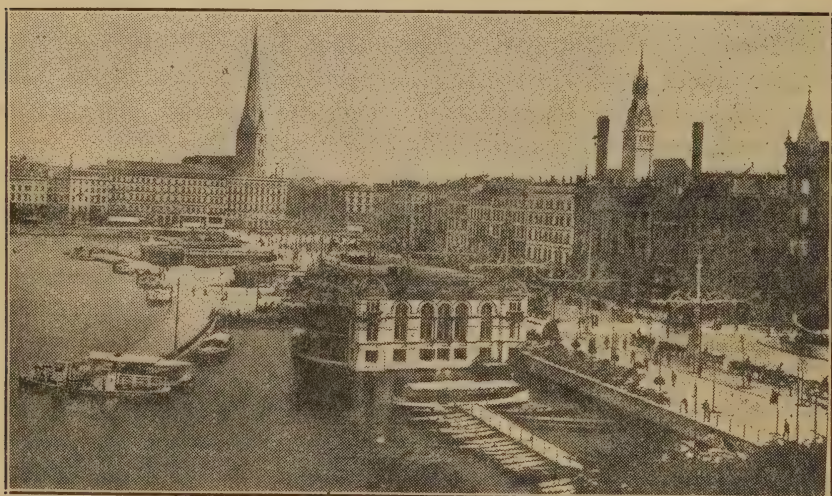


FIG. 99. Hamburg—Germany's Most Important Port<sup>2</sup>

<sup>1</sup> Simpich, Frederick: The Story of the Ruhr, *National Geographic*, Vol. XLI, May, 1922; pp. 554-559.

<sup>2</sup> Brown Brothers, New York City.

Essen is only one of the many important cities of Germany.

Are there cities like Essen in France? In England? In the United States?

Would you like to know about others?

#### EXERCISE

Divide the following cities among the members of the class. Find out where they are, their size, and why they are important. If possible, find pictures of the cities.

Berlin  
Hamburg  
Munich

Leipzig  
Dresden  
Cologne

Bremen  
Danzig

#### MAP EXERCISE

1. On an outline map of Germany locate (1) the rivers: Rhine, Weser, Elbe, Oder, Vistula; (2) the cities: Berlin, Hamburg, Munich, Leipzig, Dresden, Cologne, Bremen, Danzig.
2. Exchange maps with a neighbor. Correct his map, writing on the left margin the name of each river or city which is incorrectly located. Return your neighbor's map and receive your own.

3. Learn the location of each country that you missed. Try to follow these steps:

*First:* Compare your work with the correct location on a geography map. Note exactly wherein your work is wrong.

*Second:* Close your eyes and try to see in your mind a correct picture of each location that you missed.

*Third:* Study the geography map again to see if the picture in your mind was correct.

*Fourth:* If not, study the map carefully then close your eyes and try to picture to yourself the exact location. Repeat this process until you can picture correctly each location that you missed.

*Fifth:* On a clean map repeat the test, exchanging papers again with your neighbor correcting his test and having him correct yours.

---



GERMANY'S TREMENDOUS INDUSTRIAL DEVELOPMENT MADE HER DEPENDENT OF THE REST OF THE WORLD AND MADE THE REST OF THE WORLD DEPENDENT ON HER. GERMANY BECAME THE PIVOT ON WHICH EUROPE TURNED

Before the war Germany was the most important industrial nation on the continent of Europe. Because she lay right in the midst of the European countries she could carry on trade easily with all the nations of the continent.

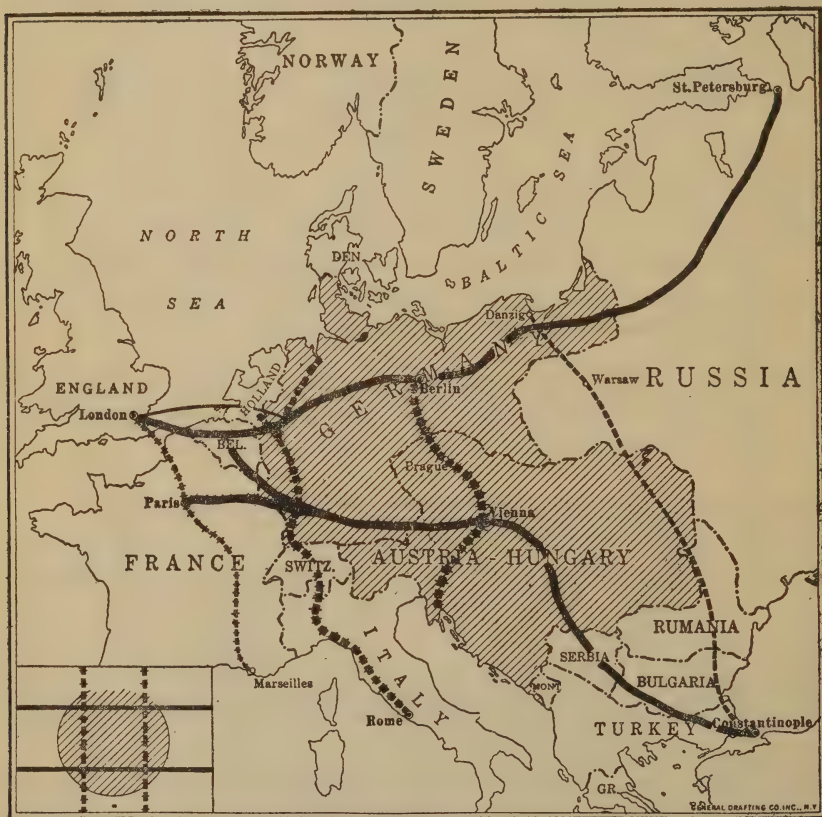


FIG. 100. The Six Principal Railroad Lines of Europe in 1914<sup>1</sup>

How many of the six main railroad lines of Europe go through Germany?  
Is any other country as favorably located in regard to these railroads as Germany?

No—Germany occupied the most favorable position for trade with all the other countries of Europe. And the trade she carried on with them was tremendous.

From Russia, particularly, but also from Austria and the Balkan

<sup>1</sup> *Our World*, New York, October, 1922.



countries, Rumania, Serbia, and Bulgaria, she drew huge quantities of wheat and other food products. To them she sent coal, machinery, and many manufactured products. With France, Italy, Belgium, and Italy, she exchanged large amounts of manufactured products. Italy and France she supplied with much of their coal.

"Round Germany as a central support the rest of industrial Europe grouped itself, and upon the prosperity of the continent mainly depended. Germany was the best customer of Russia, Norway, Belgium, Switzerland, Italy, and Austria-Hungary; she was the second best customer of Great Britain, Sweden, and Denmark; and the third best customer of France. She was the largest source of supply to Russia, Norway, Sweden, Denmark, Poland, Switzerland, Italy, Austria-Hungary, Rumania, and Bulgaria; the second largest source of supply to Great Britain, Belgium, and France. Britain sent more exports to Germany than to any other country in the world except India, and bought more from her than from any other country in the world except the United States. There is no European country except those west of Germany which did not buy more than a quarter of their total trade with her; and in the case of Russia, Austria-Hungary, and Poland, the proportion was far greater."<sup>1</sup>

In 1911 Germany was exporting twice as much coal by land as by water—which shows that she was carrying on a large part of her trade with the countries near her in Europe.

*Thus was the life of Germany bound up with all of Europe through the exchange of goods.*

#### Not Only Did Germany Trade With Europe—She Traded With All of the World

As German industries grew and produced more goods, Germany increased her trade not only with the European countries but with the whole world—with North and South America, with Africa, and with Asia.

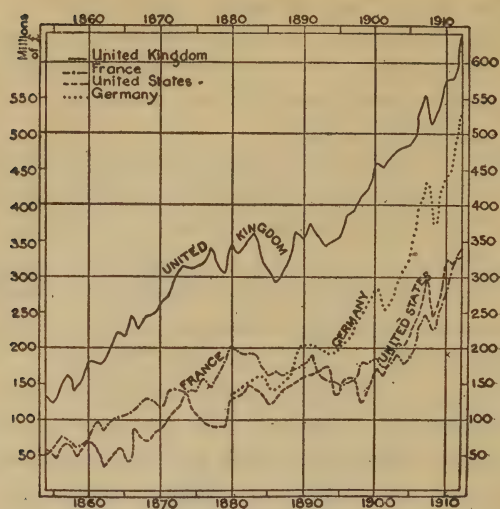
In 1894, for example, Germany's foreign trade was worth 6,899,000,000 German marks (a German mark before the war was worth about 24c.). By 1913 the foreign trade of Germany was worth about 20,867,000,000 German marks.

Germany was forced to import food and raw materials  
She paid for them by her huge exports  
of manufactured goods

Thus she depended on the rest of the world, and the rest of the world depended on her.

#### In 1914 German Foreign Trade Was Rapidly Approaching the Foreign Trade of the United Kingdom

<sup>1</sup> Adapted from Angell, Norman: *The Fruits of Victory*, The Century Company, New York, 1921, pp. 25-26.



This graph shows the amount of goods brought into the United States, France, Germany, and the United Kingdom from 1854 to 1912<sup>1</sup>

This graph shows you how the imports of Germany were creeping up on the imports of the United Kingdom. The same thing was true of exports. Germany was becoming more and more a rival of England for the trade of the world.

German business men were pushing out in all directions for trade.

"Suddenly the world was overrun with pushing, hardworking, keen young German salesmen. They had very little trouble in demonstrating that they were better business men than their easy-going British competitors. . .

"When the British merchants first felt the pressure of this new rivalry, they began to cry 'unfair competition.' The claim was general that the German goods were 'shoddy.' There was some truth in this charge at first, goods 'made in Germany' often fell below 'the good, old English standard.' But very soon it became evident that the English business men had to do with a phenomenon much more serious than such 'unfair' competition. The German products became as good—or better than—the English and everywhere cheaper.

"The new industrial Germany had no traditions. It did not stop work for afternoon tea, it did not care for cricket nor football, it did not close the factory on Derby Day. It did not pay such heavy ground rents to foxhunting gentry, nor hand over such a large share of its profits to unproductive heirs. It did not sit down in dignity and wait for business to come

<sup>1</sup> Page, William: *Commerce and Industry*, Constable and Company, Ltd, London, 1919, p. 69.

to it. It sent out 'hustling' salesmen—no Yankees have more thoroughly deserved this adjective—who felt that it was their first duty to learn the native languages.

"And these salesmen were much better educated than their English rivals. 'Education' in England is to a large extent intended to produce 'gentlemen.' In Germany it is much more practical. 'Technical' instruction both in the production and sale of material is among the principal causes of German superiority in industry. . . .

"But probably of greater importance was the fact that British industry was seriously handicapped by having an immense amount of money invested in old fashioned plants. . . . The German factories from which this competition came were new, they had been planned on the lines of modern efficiency. . . .

"Perhaps in no other point has the superiority of the German methods been more evident than in the special pride of the English—the sea-trade. The Hamburg-Amerika Line has built just as pretentious 'show-boats' for the North Atlantic route as the Cunard or White Star, but it is in the freight trade that they have completely out-distanced the English. The German merchant marine—in the Pacific trade; through Suez or around the Horn—has been better equipped in almost every detail than that of their rivals.

"For a great many years the trade along the west coast of South America was a practical monopoly for the Pacific Steam Navigation Company. They had no rivals and no need to be obliging. A few of their ships were less than twenty years old and those which came around the Horn to England had to live up to the British board of trade rules. But when their ships became too old and battered to pass the home inspection they were kept on the west coast. Recently a German line, the "Kosmos," decided to cut in on this trade. They built a fleet of great modern freighters and their agents and captains were told to be polite and obliging—not to call the natives 'niggers'. . . .

"It is typical that while all these modern German ships were handling their cargo by hydraulic derricks, most of the English merchant marine still relied on the antiquated steam donkey engine!"<sup>1</sup>

---

<sup>1</sup> Bullard, Arthur: *The Diplomacy of the Great War*. The Macmillan Company, New York, 1918, pp. 62-65.



AS THE FACTORIES OF GERMANY NEEDED MORE RAW MATERIALS,  
AS THE POPULATION NEEDED MORE FOOD, AS THE INDUS-  
TRIES PRODUCED MORE MANUFACTURED GOODS, GER-  
MANY REACHED OUT TO BUILD AN EMPIRE

We found that when England and France went in for manufacturing the British and French Empire grew rapidly.

So it was with Germany. Her Empire grew much later than those of England and France

But Germany's industries developed later than did those of France and Germany. Therefore it was not until after the other two countries had already added many colonies to their empires that Germany came into the field.

It was in the 1880s that the Germans began to look around for colonies with rich resources. And what did they find?

They found that the colonies which they would like to gobble up had already been gobbled up by other countries, particularly by France and England. Most of Africa was gone! Northern North America was gone! India and Indo-China were gone! South America was prohibited.

However, Germany did succeed in getting four African colonies. From these colonies Germany's businessmen got gold, diamonds, rubber, timber, and other valuable tropical products.

Germany also got control of Tientsin, Hankow, and Kiaochow as well as of Shantung in China.

The story of Germany in her colonies is just about the same as that of England and France. The natives were often maltreated and forced to labor whether they wished to or not. The object of the Germans, like that of the English and the French, was largely to make money in the colonies.

GERMANY, TOO, RECOGNIZED THE IMPORTANCE OF THE  
MEDITERRANEAN. SHE TRIED TO EXTEND HER  
EMPIRE INTO WESTERN ASIA

The most important of all Germany's efforts to build up an Empire were centered in Western Asia.

Look at Fig. 101 the map of *Western Asia*. Where have you read of this region before? Did any other countries add parts of western Asia to their Empire?

From the 1880's on the Germans carried on business more and more in this region. They saw vast possibilities for business in these lands

FIG. 101. Where Germany tried to build up her Empire <sup>1</sup>

of Western Asia. *There were oil fields, coal and iron deposits and forests to provide great quantities of lumber.*

In the northern part of the region large crops could be grown. Mesopotamia in the Tigris-Enphrates Valley needed only irrigation, an artificial water supply, to make it a rich agricultural district where wheat and cotton could be grown in vast quantities.

Prince Von Bülow of Germany said, "If one can speak of boundless prospects anywhere, it is in Mesopotamia."

Along the shores of the Mediterranean harbors could be built; railroads, terminals, and warehouses were needed all through Western Asia; factories could be built to turn raw materials into manufactured goods *and the natives of these countries could be hired at low wages*; coal and iron mines could be dug and worked. Truly Western Asia offered almost boundless prospects to German business men for making money.

Then, too, there were millions of people in this region to buy the products of German factories—cheap cotton cloth, agricultural machinery, guns, these were a few of the many things which the millions of people of these eastern countries would buy.

What do you think? Was Western Asia a region of tremendous business opportunity?

<sup>1</sup> *Asia*, Vol. XXII, April, 1922, New York, p. 260.

RAILROADS ARE NECESSARY TO OPEN UP BACKWARD COUNTRIES  
SO GERMANY PLANNED TO BUILD A RAILWAY  
THROUGH WESTERN ASIA

This was the Berlin to Bagdad Railway.

Railroads, we have found, are necessary in industrial countries. They carry food, raw materials, and manufactured goods from one place to another.

They are also necessary in undeveloped countries if the business men of the industrial countries are to take away raw materials and to carry in their manufactured goods.

That is the reason that the Germans planned to build the *Berlin to Bagdad Railway*.

Find Berlin and Bagdad on the wall map. See how a railway connecting the two points would lead from the heart of industrial Germany to the heart of undeveloped Mesopotamia.

Look again at Fig. 101, the map of Western Asia.

Do you see the railway running through Constantinople twisting down through Anatolia, running through Aleppo, and over to Nisibin. Then you see an unfinished strip between Nisibin and Asshur. Then the railway runs on to Bagdad.

This is the Berlin-to-Bagdad Railway.

On this railway, in the years before 1914, German business men hoped to send out the manufactured products of Germany and to bring back the coal, iron, oil, cotton, wheat, and other products of Western Asia. Moreover the railway would carry goods back and forth between the far eastern lands and Europe. It followed what had for centuries been the route from India and other lands of the far east to Europe.

THE BAGDAD ROUTE WAS THIRTY CENTURIES OLD!

"The Bagdad route was not discovered by German engineers. It is the oldest trade route of the world. It was the 'Royal Road' from India to Europe. The ancient kingdoms of Persia, Babylonia, Assyria, Parthia, and Media were enriched by Oriental trade much as England is today.

"This 'Royal Road' of the ancient and mediaeval world is a natural highway between Asia and Europe. It was the only avenue from the Orient before the development of navigation. Into Mesopotamia the mountain ranges of Persia and Asia Minor open their gateways. The Tigris and Euphrates Rivers are navigable to the Persian Gulf. On the north is Asia Minor, a region as large as France, bounded on the south by . . . mountains which open to the plains below through the Cilician gates. There gates guard the highway to Constantinople and Europe. . . .

"Through these mountains passes the trade and commerce of Asia found



its way to Europe for thousands of years. This, too, was the great battle ground of antiquity. It was the prize of countless wars. The greatest event of ancient and mediaeval history centre about this region. . . .

"For thousands of years rulers have coveted Mesopotamia and built their empires about its rivers because of the fertility of the country and the wealth which came from the trade with the East. The 'road' went overland from India through Persia to Mesopotamia. It came up from the Persian Gulf. It followed the Tigris and Euphrates valleys to the north. It passed through Babylon and Bagdad. It crossed over Asia Minor to Constantinople. It touched the cities of Syria and Palestine. It crossed the deserts of Egypt. The trade of the Orient made Mesopotamia the center of the ancient and mediaeval world as it has made London the center of the world today."<sup>1</sup>

You can be sure that the trade route which had been so important to the ancient world and to the world of the Middle Ages is even more important to the industrial nations of the modern world.

So it was that Germany planned to build the Berlin-to-Bagdad Railway.

How the French and English were jealous of the efforts of the Germans to build an empire in western Asia because they wanted this valuable region for themselves, how they fought for years to keep the Germans from building the Berlin to Bagdad Railway, and how, finally, this conflict between the great industrial nations helped to bring on the Great War. . . . all this is another story which we hope someday to tell you.

---

#### EXERCISE

Write a few paragraphs stating why the Mediterranean is so important to modern industrial nations.

---

THE WAR THAT CAME IN 1914 BROKE UP THE INDUSTRIAL AND TRADE RELATIONS OF THE WORLD WHICH EXISTED BEFORE THE WAR.

AS A RESULT THE PEOPLE OF EUROPE HAVE SUFFERED TERRIBLY. THOUSANDS HAVE DIED AND ARE DYING OF STARVATION.

---

<sup>1</sup> Howe, Frederick C.: *The Only Possible Peace*, Charles Scribner's Sons, New York, 1919, pp. 80-82.

The tragedy of the years since 1914 is a tragedy which has touched all of Europe.

Famine and poverty and death have been the lot of great sections of Europe, and Germany has been one of the worst sufferers.

Why is it that these calamities have followed the war?

We have seen that all the world today is tied together by trade. England, France, and Germany depend upon far parts of the world for food and for raw materials for their factories. Agricultural countries must have the machines and farm implements which these countries produce. The world is *one* world, and if any part is injured, all parts suffer.

What happened in the war? The nations of the world turned their energies to fighting rather than to producing goods.

They tried as part of their warfare to ruin each other's trade. Thus old trade connections between the nations of the world were destroyed.

#### GERMAN TRADE WITH THE OUTSIDE WORLD WAS RUINED

Parts of Europe—and Germany was in that part—suffered particularly, because trade with the outside world almost entirely stopped. England with her many ships was able to block the ports of Germany and keep ships bearing goods from going in and out of the ports.

Look at your map of Germany, Fig.— and see how easy this was to do.

This *blockade* of Germany and other countries in the center of Europe continued. Germany could not bring in food and raw materials; nor could she send out the products of her factories.

#### SOME OTHER REASONS WHY GERMANY WAS RUINED BY THE WAR.

##### WHAT THE ALLIES TOOK FROM GERMANY

Germany was defeated in the war. Therefore the Allies, France and England were the leading countries, took away Germany's colonies. They took away her ships which had carried goods back and forth between Germany and other parts of the world. They demanded great quantities of coal; they demanded many of the cows that provided meat, milk, and butter to the German people; they demanded locomotives and other railroad materials; they demanded machinery; and they demanded payments in gold.

Then the Allies Took From Germany Her Richest Coal and Iron Fields and One of Her Great Industrial Districts

What did Germany lose in losing Alsace-Lorraine? the Saar? Upper Silesia? Posen and West Prussia? The City of Danzig? What did she lose when the Ruhr was invaded?



FIG. 102. The Land Lost by Germany as a Result of the War <sup>1</sup>

#### MAP EXERCISE

1. On outline map of Germany as she was in 1914 draw lines showing territory lost by Germany as a result of the war. Then fill in the name of the region and write in the chief product or products.

2. Exchange maps with a neighbor. Correct his map, writing on the left margin the name of each region or product which is incorrectly located. Return your neighbor's map and receive your own.

3. Learn the location of each region or product that you missed. Try to follow these steps:

- Compare your work with the correct location on a geography map. Note exactly wherein your work is wrong.
- Close your eyes and try to see in your mind a correct picture of each location that you missed.
- Study the geography map again to see if the picture in your mind is correct.
- If not study the map carefully then close your eyes and try to picture to yourself the exact location. Repeat this process until you can picture correctly each location that you missed.
- On a clean map repeat the test, exchanging papers again with your neighbor correcting his test and having him correct yours.

<sup>1</sup> Moulton, Harold G., and McQuire, Constantine E.: *Germany's Capacity to Pay*, McGraw-Hill Book Company, New York, p. 106.



Thus, Germany, with her colonies gone, her districts rich in coal, iron, and industries gone, her trade and shipping destroyed, lost her old prosperity.

GERMANY'S PRODUCTION OF FOOD, RAW MATERIALS, AND OF MANUFACTURED GOODS HAS DECLINED AND HER TRADE HAS FALLEN OFF DURING AND SINCE THE WAR

The fields and mines and factories of Germany which produced in such abundance before the war produce now much less.

### Coal Production Has Declined

The coal mines which in 1913 produced 191,500,000 tons of coal, produced only 161,500,000 tons in 1918.

### Factories Have Stopped Producing Goods

Factories—particularly in the last few months since the invasion of the Ruhr—have been closing down until millions of men are out of work.

### The Production Of Food Has Declined

What of the agricultural products, the foodstuffs that must feed the people, particularly since Germany is no longer able to import food from other countries as she used to do?

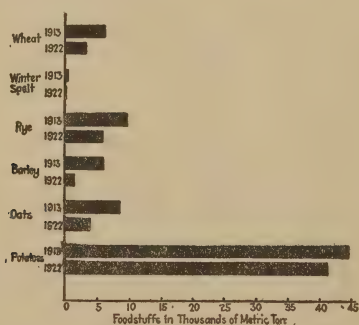


FIG. 103. Foodstuffs Produced in Germany, 1913 and 1922<sup>1</sup>

What does this bargraph show? Was more food or less produced in Germany in 1922 than in 1913? Was there much difference?

<sup>1</sup> Moulton, Harold G., and McGuire, Constantine E.: *Germany's Capacity to Pay*, McGraw-Hill Book Company, New York, 1923; p. 131.

## Foreign Trade Has Fallen Off

"One can get an immediate birdseye view of Germany by visiting Hamburg. The magnificent docks there have been swept clean of German shipping. A few small foreign ships are at the docks which, before the war, furnished barely room for a tremendous tonnage. There are approximately two thousand moving cranes in the harbor; on the day when I visited the port about a hundred of these were working."<sup>1</sup>

AMOUNT OF GERMAN TRADE IN 1922 AS COMPARED WITH 1913<sup>2</sup>

CLASS	IMPORTS		EXPORTS	
	1913	1922	1913	1922
Raw Materials and Partly Manufactured Goods	59,701,000	1,337,000	59,026,000	14,272,000
Manufactured Goods	1,249,000	1,339,000	9,321,000	5,836,000
Foods	11,700,000	1,099,000	5,368,000	1,443,000
Living Animals	180,000	1,000,000	2,000	5,000

What does this table show? Is Germany bringing in and sending out more or less goods than in 1913?

## WHAT HAVE WE FOUND OUT ABOUT GERMANY SINCE THE WAR?

Germany, then, can no longer mine great quantities of coal as she used to do, nor can she produce so much manufactured goods. Therefore she can not ship these goods out to the rest of the world, and in return ship in food for her people and raw materials for her factories. Nor is there as much food raised in Germany as before the war.

Thus as Germany's trade connections with the rest of the world have been cut off, her condition has become worse and worse. *An industrial country can not live alone.*

## WHAT IS THE EFFECT OF THESE CHANGES UPON THE GERMAN PEOPLE?

Millions of Germans are unemployed and the ones who work do not make enough to feed themselves and their families. The city workers of Germany are starving.

"On the side streets and by-ways of Munich and Karlsruhe every third or fourth child had boils or blotches on its face. . . . Apart from profiteers, the people looked either anxious, or sour and embittered, or listless, or abstracted, or in dull despair. . . . Suicide was on the increase. . . . The children's hospitals were overcrowded. The children in the towns had very largely ceased to play games, or to play at all. The faces, as the human current swept by you, were gray and bloodless, and none more so than those of the University students."<sup>3</sup>

<sup>1</sup> Bass, John Foster: *The Peace Tangle*, The Macmillian Company, New York, 1920; p. 109.

<sup>2</sup> Ibid. p. 120.

<sup>3</sup> Mitchell, Langdon: Germany, *The Atlantic Monthly*, April, 1923.

### THE WORKERS IN A MACHINE TOOL PLANT BEFORE AND AFTER THE WAR

"In the Ernst Schiess machine-tool works of Dusseldorf, I found 2,000 men at work. This plant makes heavy machinery of the type used in locomotive shops, engine-building works, and arsenals. It is a strong competitor of American machine-tool works in the export trade. I remember distinctly the men at the Schiess works before the war; they looked, for the most part, like athletes, splendidly developed and highly disciplined. The Schiess Works, in common with other machine tool plants, lost during the war about 60 per cent of their workmen. . . .

"When the war ended men who had previously worked in the plant returned, but always it was a small proportion of those who had left and seldom did the men return in as fit condition as when they departed. The works felt in duty bound to re-employ men who had been maimed or otherwise injured but who were still capable of rendering some service. Today at the Schiess Works and at other plants . . . the parade of the workmen from the gates at closing hours was usually a mere apparition of the physical strength of former days. Haggard faces, sunken cheeks, hectic countenances, gazed eyes, all bespoke men in unfit condition."<sup>1</sup>

### IT IS THE WORKERS AND THE PROFESSIONAL CLASSES OF THE CITIES WHO SUFFER PARTICULARLY

There are still people in Germany who have enough to eat—the peasants in the country and the well-to-do people of the cities. But the poorer people of the cities, the workers and the professional people are the ones who suffer.

An appeal for food for the starving German workers shows this fact.



## Twenty Million Workers Sentenced to Death in Germany

<sup>1</sup> Garden, Captain Godfrey L.: Shell Shock in Europe's Industry, *Our World*, Vol. 3, July, 1923, pp. 24-26



In Germany they are beginning to carry out the greatest mass-execution known in human history. Twenty million people are sentenced to death. Men, women and children. Old and young. There exists no machinery which could carry out this mass death-sentence. There are not enough gallows and electric chairs, nor is it possible to muster enough hangmen and firing squads to carry out this mass execution. **MASS HUNGER** will kill these millions.

The Chicago Tribune, gives in dry figures the most frightful picture of this great mass-starvation.

Raymond Fendrick, the Berlin correspondent of the Tribune, writes on December 1, 1923:

"A Tribune survey shows there are 20,000,000 persons in Germany today unable to provide themselves with minimum rations necessary to preserve health.

"Taking 882,000 calories annually as a sufficient health ration and 1,323,000 calories annually as the pre-war ration (the average German absolutely stuffed himself with food before the war). The Tribune has divided the 63,000,000 population of Germany as regards their present nourishment into the following classes:

- "1. Agricultural and allied professions who are now consuming the full pre-war ration and who number 23,000,000
- "2. The more prosperous urban classes—industrialists, traders, high executives, officials, resident foreigners, foreign students and tourists—who are consuming the pre-

war ration and who number 7,000,000.

- "3. Skilled workmen and small shopkeepers who consume a healthful, but not a pre-war, ration and who number 13,000,000.

- "4. The war injured and dependent pensioners, capitalists ruined by the fall of the mark, paupers, professional and artistic classes, unemployed, and men and women workers with unskilled trades who are unable to provide themselves either with pre-war or minimum health ration and who number 20,000,000.

"The rations of the last class, which is largely of town dwellers, range just below the bare minimum down to almost complete starvation.

"The Tribune correspondent's figures are based upon reports of official American agencies.

"These have been cross-checked by the most accurate German statistics and widespread personal investigation by a half dozen Tribune investigators in all parts of Germany."

Class 4 represents the 20,000,000 workers who are sentenced to death. They form 31.8% of the population but will receive only 7.4 per cent of the food supply.

The Junkers and Stinnes and General Seeckts have plenty of food; but the unskilled workers, the unemployed, the widows of the fallen soldiers, the professional men, the expropriated former lower middle class, have not enough money to buy food.

We witness in Germany the greatest mass starvation that world history knows.

You see again what happens when a modern industrial nation is cut off from the rest of the world.

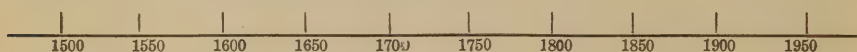
### DOES THE COLLAPSE OF GERMANY AFFECT THE REST OF THE WORLD?

You can answer this question for yourself. Why would the rest of Europe be particularly affected by the destruction of German trade and industries? Was the rest of Europe dependent on Germany? What did you find out in the sections on England and France which showed that these two countries were injured by having their trade with Germany ruined? If these two countries depended upon Germany, the countries to the east and south were far more dependent upon this industrial center of Europe.

**THE DESTRUCTION OF GERMANY'S INDUSTRY AND TRADE  
HAS BEEN DISASTROUS NOT ONLY WITHIN THE COUNTRY  
BUT ALSO TO ALL OF EUROPE AND TO ALL OF THE  
WORLD. EACH PART OF THE MODERN WORLD  
IS TIED TO EVERY OTHER PART, AND INJURY  
TO ONE COUNTRY INJURES ALL**

### TEST FOR SECTION XI

I. Mark on this time line with arrows the time when the Industrial Revolution became important in England, France, and Germany. Above each arrow write the name of the country.



II. Write in the blank after each sentence the name of the country it describes:

One country began to go in for manufacturing rather late, and never became a completely industrial country. ....

One country began to go in for manufacturing about a hundred years after modern machines were invented but became one of the chief industrial countries in the world. ....

One country began its industrial revolution about a hundred and fifty years ago, and has continued steadily its industrial development. ....

III. Finish these sentences so that they describe Germany between 1800 and 1870.

Agriculture was.....

The towns were.....

Industries were.....

Trade was.....

IV. Cross out the words in the following sentences which are incorrect:

1. Germany produced  $\left\{ \begin{array}{l} \text{less} \\ \text{more} \end{array} \right\}$  food in 1914 than in 1870.

2.  $\left\{ \begin{array}{l} \text{Fewer} \\ \text{More} \end{array} \right\}$  people lived on farms in 1914 than in 1870.

3. German agriculture  $\left\{ \begin{array}{l} \text{was able} \\ \text{was not able} \end{array} \right\}$  to provide the German people with food in 1870.

4. German agriculture  $\left\{ \begin{array}{l} \text{was able} \\ \text{was not able} \end{array} \right\}$  to provide the German people with food in 1914.

5. Germany  $\left\{ \begin{array}{l} \text{did bring} \\ \text{did not} \end{array} \right\}$  in large quantities of food from other countries in 1914.

6. Germany was  $\left\{ \begin{array}{l} \text{more able} \\ \text{less} \end{array} \right\}$  to supply her own food in 1914 than was England.

7. Germany was  $\left\{ \begin{array}{l} \text{more able} \\ \text{less} \end{array} \right\}$  to supply her own food in 1914 than was France.

## V. Fill in the blank spaces in the following sentences:

The farms in the west and south of Germany are for the most part-----  
 and owned by----- This system is much like that in-----  
 The farms in the north and east are for the most part farmed and owned by-----  
 ----- This system is much like that in-----

## VI. Check the statements which were true of Germany before 1914.

1. Germany exported coal to France.
2. France imported iron ore from Germany.
3. France imported iron and steel goods from Germany.
4. Germany had the most important coal deposits in Europe.
5. France adopted the new types of machinery more completely than Germany did.
6. Coal and iron were found together in certain districts in Germany.
7. The Ruhr was one of the less important industrial districts of Germany.
8. France was less completely industrialized than was Germany because she had less coal.
9. The iron and steel industry was less important in Germany than in England.
10. Germany produced more coal than England.
11. Towns grew up around the coal beds of Germany.
12. Germany had fewer great cities than France.
13. A larger proportion of the population lived in cities in Germany than in France.
14. A larger proportion of the population lived in cities in England than in France.
15. The transportation system of Germany was not so good as that of France.
16. Goods could be carried over the greater part of Germany either by water or railroad.

## VII. Fill in the blanks:

The greater part of Germany's trade was carried on by-----  
 (which, land or sea?)  
 while England's trade was carried on largely by-----  
 (land or sea?)  
 This was because Germany was-----  
 -----  
 -----  
 while England was-----  
 -----  
 -----

## VIII. Make a list of the reasons why industrial nations add colonies to their empires.

Check any of those reasons which you think caused Germany to try to build up her empire in western Asia.

-----  
 -----  
 -----

## IX. Here are some of the ways in which modern industrial nations depend upon the outside world. Check the ones which apply to Germany. Check twice the ones you consider most important.

1. They buy food from other countries.
2. They sell food to other countries.
3. They buy raw materials from other countries.
4. They sell raw materials to other countries.
5. They buy manufactured goods from other countries.
6. They sell manufactured goods to other countries.
7. They build ships to carry goods to and from the country.
8. They add undeveloped regions to their empires.
9. They build railroads, harbors, and factories in undeveloped countries.
10. They get possession of important points on the trade routes of the world.



## BOOKS FROM WHICH YOU CAN GET ADDITIONAL INFORMATION ON GERMANY

### Germany On the Continent

- Allen, Nellie A.: *Europe*, Ginn and Company, Boston, 1913.  
Germany and Her Toys and Canaries, pages 162-195.
- Allen, Nellie A.: *The New Europe*, Ginn and Company, Boston, 1920.  
Germany and the World War, pages 174-197.
- Carpenter, Frank G.: *Europe*, American Book Company, 1912.  
In the German Empire, pages 186-195.  
The seaports of Germany, pages 195-203.  
Berlin, pages 203-215.  
Rural and manufacturing Germany, pages 223-233.
- Chamberlain, A. H.: *Europe*, The Macmillan Company, New York, 1916.  
The German Empire, pages 83-96.  
The River Rhine, pages 97-107.
- Dutton, M. B.: *Little Stories of Germany*, The American Book Company, New York, 1907.
- Henderson, E. F.: *A Short History of Germany*, The Macmillan Company, New York, 1919, Vol. 2. Economic Progress between 1871-1914; pages 508-541.
- Keller, A. G. and Bishop, A. L.: *Commercial and Industrial Geography*, Ginn and Company, Boston, 1912.  
Sugar Beet Regions in Germany, pages 129-130.
- Robinson, J. H., and Beard, C. A.: *The Development of Modern Europe*, Ginn and Company, Boston, 1908, Vol. 2.  
Formation of the German Empire, pages 108-123.  
The German Empire, pages 130-150.
- Sedgwick, Mrs. Alfred: *Germany*, A. & C. Black, Ltd., London, 1915.
- Smith, J. Russell: *Commerce and Industry*, Henry Holt and Company, New York, 1916. The German Empire, pages 374-383.
- The Wends of the Spreewald, *National Geographic*, Vol. 43, March, 1923; pages 327-336.

### Germany's Colonies

- Carpenter, Frank: *Africa*, American Book Company, New York, 1916.  
German East Africa, pages 252-260.  
Kamerun, pages 218-222.  
German Southwest Africa, pages 322-325.  
Togoland, page 206.
- Chamberlain, J. F., and A. H.: *Africa*, The Macmillan Company, New York, 1917.  
German East Africa, pages 123-126.  
German Southwest Africa, pages 151-154.
- Germany's Dream of World Domination: *National Geographic*, Vol. 33, June, 1918; pages 559-567.
- One Means to Relieve the World Crisis, *Review of Reviews*, Vol. 65, March, 1922; pages 321-322.

### Problems Which Have Followed the World War

- Cartoons on the Ruhr situation, *Literary Digest*, Vol. 76, March 3, 1923; page 15.
- Europe at Work—Germany, the Saar and the League, *Scribner's Magazine*, Vol. 71, April, 1922; pages 451-464. Excellent pictures.
- Germany: Land of Perpetual Nightmare, *The Literary Digest*, Vol. 79, October 13, 1923; pages 40-46.
- Germany's Difficulties, *Current History Magazine*, New York Times, Vol. 15, December, 1921; pages 504-506.

- Germany's Road to Ruin, *The Literary Digest*, Vol. 78, August 11, 1923; pages 13-14.
- Germany's New State of Mind, *Current History Magazine*, *New York Times*, Vol. 16, April, 1922; pages 46-52.
- The Real Poverty of the German People, *The Literary Digest*, Vol. 74, September 2, 1922; pages 22-23.
- Ruhr Fuel and French Ore, *Literary Digest*, Vol. 76, March 31, 192; page 19.
- The Story of the Ruhr, *National Geographic*, Vol. 41, May, 1922; pages 553-564.

### Fiction Which Gives Life in Germany

- Charles, Mrs. E. R.: *Chronicles of the Schonberg-Cotta Family—A Tale of the Reformation*, A. L. Burt Company, New York.
- Knapp, Adeline: *The Boy and the Baron*, The Century Company, New York, 1902.
- Pyle, Howard: *Otto of the Silver Hand*, Charles Scribner's Sons, New York, 1921. Story of Germany during the middle ages.
- Taylor, Bayard: *Boys of Other Countries* (The two herd boys). G. P. Putnam's Sons, New York, 1912.

## SECTION XII

### I. WHAT WOULD HAPPEN TO THE UNITED STATES IF SHE COULD NOT TRADE WITH OTHER COUNTRIES?

What do you think would happen if the people of the United States should wake up some morning and find such newspaper headlines as these staring them in the face?

### England, France, Germany and Japan Refuse to Trade With the United States

---

#### NO PRODUCTS OF OTHER COUNTRIES COMING TO AMERICAN PORTS

---

History has repeated itself. What happened to the American people in 1807 has happened again—no foreign goods are coming to American ports. For the first time in one hundred years we are cut off from other countries. Neither our ships nor those sailing under foreign flags will bring us the products of others lands. The United States must depend upon herself, at least for a while,—no one can predict for how long. The President has called special meetings of his Cabinet. Business and labor leaders are hurrying to Washington to take stock of the resources of the nation and to find out the best way of handling them.

Can the American people exist with-

out supplies from other nations? That is the question now facing the United States. Can we raise enough wheat, corn, and cattle to meet our needs? Can flour be made to feed 100 million people? Can meat be packed and distributed to all parts of the country? Have we enough fuel in our mines and forests to keep our railroads going and our mills running? Can our iron mines and steel mills continue to operate, or must they cut down to part time? Will building slow up, and cotton and woollen manufacturing plants close their doors? Will millions of our men and women workers be thrown out of employment? These are questions that the American people are now forced to answer.

---

#### CAN COUNTRIES EXIST INDEPENDENTLY OF EACH OTHER? CAN THE UNITED STATES?

Of course the newspaper clipping is imaginary, and to us in America it does not seem possible that other nations would ever combine against us and refuse to trade with our country.



But suppose that they did. They have refused to trade with Russia ever since 1918. If they refuse to trade with one country, is it not possible that they might refuse to trade with another?

What has life in Russia been like since 1918? Have her people had all they needed to eat and to wear and to keep them warm since other countries stopped trading with her? No, Russia is starving, and thousands of her people are dying from lack of food and insufficient clothing. Let us think about what would happen to us if the United States had to depend upon herself alone for all that she needed.

Would the people of the United States starve? Would we, like the Russians, die in thousands? Would our children drop onto their cots in hunger and weakness, and lie there until they died as the Russian children are doing? Every few years we read of great famines in other countries, in India and China, and of hundreds of thousands of people dying of starvation. If other nations refused to trade with us would the people of the United States suffer, too?

Let us study an example of what happened recently in Europe.

When the World War ended in 1918 Austria had been cut off  
from other countries for a long time. For four years more  
she was unable to produce goods and to trade with  
other countries

In 1921 an American visitor sent back this account of the way  
people were then living in Vienna

"In Vienna soap is more precious than gold, and as for food there is so little that children die daily of starvation and of tuberculosis. . . Now there is no gaiety, and the women, who were brought up to avoid work, must struggle to make both ends meet."

The American visitor took a Viennese woman out to lunch, and this is what she said of her and her family.

"She ate ravenously. I took her to the best hotel. There for enormous prices one could get a real meal. When she had finished she looked at my plate: 'May I take what is left?' she said.

"She took out the daintiest of pocket-handkerchiefs. She brushed the remnants into it; then she put it into the silk lined bag. Without a quiver, quite simply, she said: 'I no longer have any pride. We are starving. My family will envy me because I have had meat. It is long since we have had any. . . .

"Miss von Pott's uncle had been an Austrian Ambassador. The family still wore beautiful clothes; they still lived with quaint formality. But their only food was the regulation ration. It was not enough and they could buy no more. The pension allowed diplomats was that paid under the old regime. With the drop in the value of money this pittance was not enough even for rent. They were slowly being squeezed to death.

"There was a diplomats' kitchen for destitute diplomats. Here the starving aristocracy could eat. They sat . . . and consumed cabbage soup. The von Pott family ate at the kitchen. But cabbage soup is not very nourishing. Miss von Pott's mother was dying. She had lost forty pounds. I had a few cans of sardines and a little sweet chocolate brought from Switzerland. These I gave Miss von Pott for her mother. She was very grateful. When she found I wanted to study starvation in Austria, she said, 'Let me take you about.'

"Each day we lunched together. Each day she took the scraps left back home."

Did that story give you a glimpse of what happens in a country  
when people stop trading? Before the War Vienna's popu-  
lation depended for food on trading with distant regions  
in Austria-Hungary. The World War broke up  
Austria-Hungary and much of Vienna's  
trade stopped

---

EVIDENTLY SOME COUNTRIES CANNOT LIVE BY THEMSELVES  
CAN THE UNITED STATES?

DO YOU THINK IT IS IMPORTANT TO FIND OUT?

---

EXERCISE

A. WHAT ARE THE NECESSITIES OF LIFE FOR THE AMERICAN  
PEOPLE? B. WHAT ARE THEIR COMFORTS AND LUXURIES?

A. The necessities of life in America.

1. Make a list on the blackboard of the kind of food you must have regularly every day in order to live. Make sure that you include only things that are regarded as necessary.

2. In another column list the materials that would be needed to make clothing that you would have to have. For each item ask yourself whether it is absolutely necessary.
3. Make a third list of the materials you can think of that are necessary for building houses.

### B. The comforts and luxuries of life

Now make three more lists of kinds of food, clothing and shelter that would not be necessary in order that you might live, but that are necessary to comfortable living.

If people are to be well and happy they need at least sufficient food, shelter, and clothing.

Can the United States produce them?

---

YOU HAVE ALREADY LEARNED SOME FACTS ABOUT THIS QUESTION  
IN THE PAMPHLET "RESOURCES, INDUSTRIES, AND CITIES"

BEFORE YOU STUDY FURTHER IN THE PRESENT PAMPHLET HAVE TWO OR THREE VERY SHORT AND INFORMAL OPEN FORUM DISCUSSIONS ON SUCH QUESTIONS AS—RESOLVED: THAT THE UNITED STATES CAN FEED HERSELF; AND, RESOLVED: THAT THE UNITED STATES CAN SUPPLY THE MANUFACTURED GOODS SHE NEEDS, ETC.

In your study of "Resources, Industries, and Cities of America" you have already learned much that will help you to debate these questions. Use only the facts that you know now.

From your class form two groups, one to debate each side of the question. Allow, say, ten or fifteen minutes to get facts ready. Permit each team to use only "*Resources, Industries and Cities*" and what you now know in getting facts and arguments.

---

*To the Teacher:* At this point develop from the suggestions of the pupils, first, a complete blackboard list of food, clothing, and shelter items that are *necessities*; second, make a list of food, clothing, and shelter items that would be regarded not as necessities, but as *articles of comfort and luxury* which the masses of our people do not enjoy and which we could get along without. The purpose of this exercise is to have the pupils separate in their minds the necessities of life from articles of comfort and luxuries.



Do not study ahead in the pamphlet.

Perhaps you can suggest other important questions to debate besides the two we have stated.

AS A RESULT OF THIS "OPEN FORUM" MAKE A BLACKBOARD LIST  
OF THE NEEDS YOU NOW THINK THE UNITED STATES  
CAN SUPPLY HERSELF

Be sure that you include the important foodstuffs—wheat, potatoes, etc., the basic raw materials like coal, oil, iron, cotton, and rubber; the important manufactured goods like steel rails, locomotives and cars, building materials, clothing, etc.

DO YOU KNOW NOW ENOUGH FACTS TO ANSWER THE QUESTION:  
CAN THE UNITED STATES LIVE BY HERSELF?

---

WE SHALL STUDY MORE ABOUT IT IN THIS SECTION

THE FIRST QUESTION: DOES THE UNITED STATES PRODUCE  
ENOUGH FOOD TO FEED HER OWN PEOPLE?

Do you remember this table that was given in "Resources, Industries and Cities?"

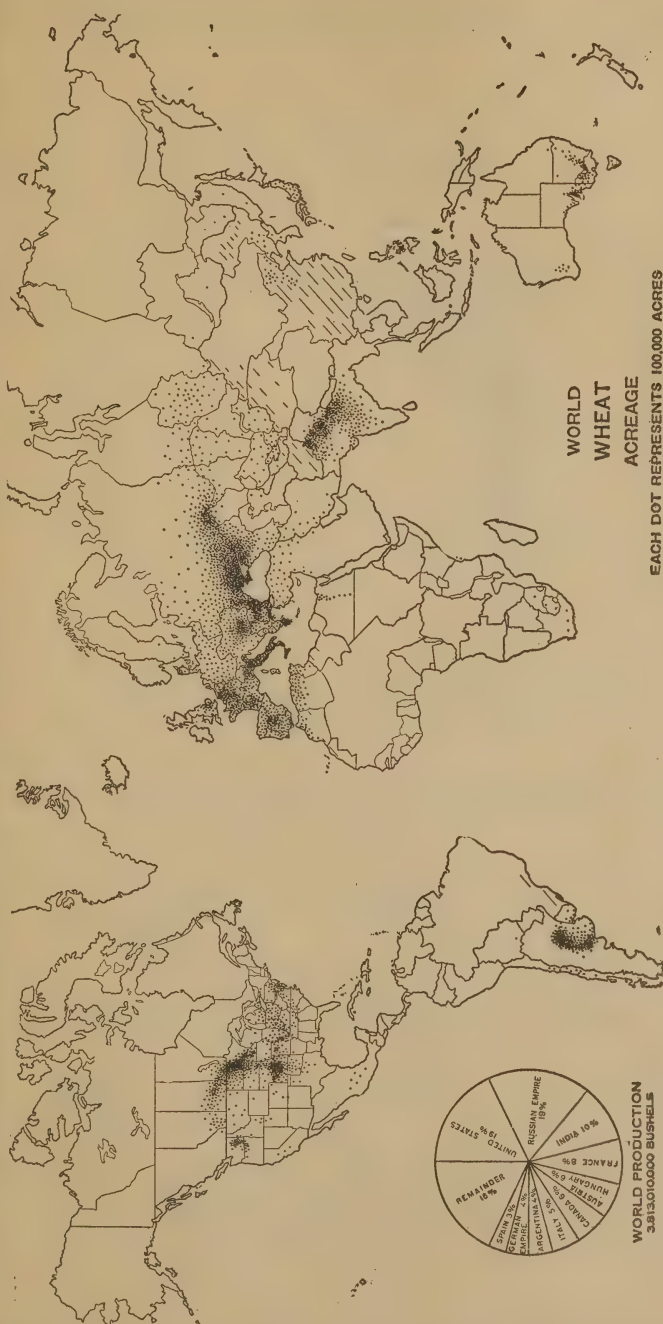
In 1920 the United States produced:	{	70 per cent of the world's corn
		25 per cent of the world's oats and hay
		20 per cent of the world's wheat
		13 per cent of the world's barley and flaxseed
		7 per cent of the world's potatoes
		5 per cent of the world's sugar

Does this tell you whether the people of the United States produced enough of these foodstuffs to feed themselves?

Suppose American farmers did produce 20 per cent of the world's wheat? Is 20 per cent enough to feed 105,000,000 Americans?

How can you tell?

Study the map of Fig. 85.



Finch & Baker: *Geography of the World's Agriculture*, U. S. Department of Agriculture.

Fig. 104. Does This Map Give you the Facts you Need to Enable you to tell Whether the United States Produces Enough Wheat to Feed her Own People?

What are the Great Wheat Producing Countries of the World?

What do you Still need to Know?

There is a second way to study the question of America's dependence on other nations. That is, to compare the amount of foodstuffs she produces with the amount she consumes.

Here are the facts for wheat.

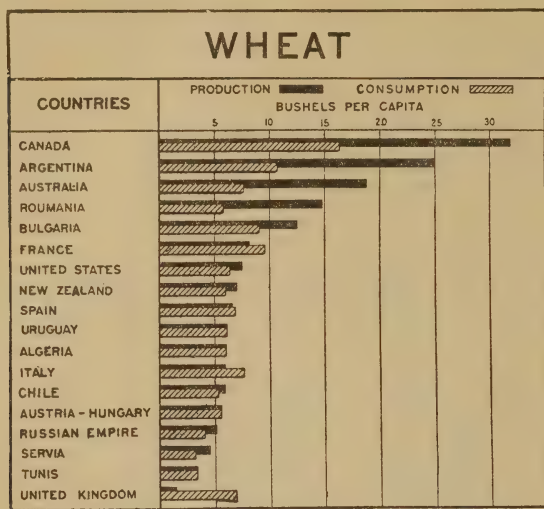


FIG. 105. Does the Bargraph Enable you to Tell Whether the United States Produces Enough Wheat for the Bread of the American People? <sup>1</sup>

What does the length of each black bar in Fig. 86 mean?

What does the length of each cross lined bar mean?

#### EXERCISE

Make two columns on the blackboard.

Title one: (1) "Countries which help to supply other countries with wheat." Title of the other (2) "Countries which depend on others for wheat."

From the bar-graph write in each column the appropriate countries.

Of the United Kingdom, France, and the United States which one or ones produce enough for their own people? (Germany is not included because she depends more on potatoes, rye, and other foods.)

<sup>1</sup> Finch & Baker: *Geography of the World's Agriculture*, U. S. Department of Agriculture.

### What About Other Important Foodstuffs: Corn, Cattle and Potatoes

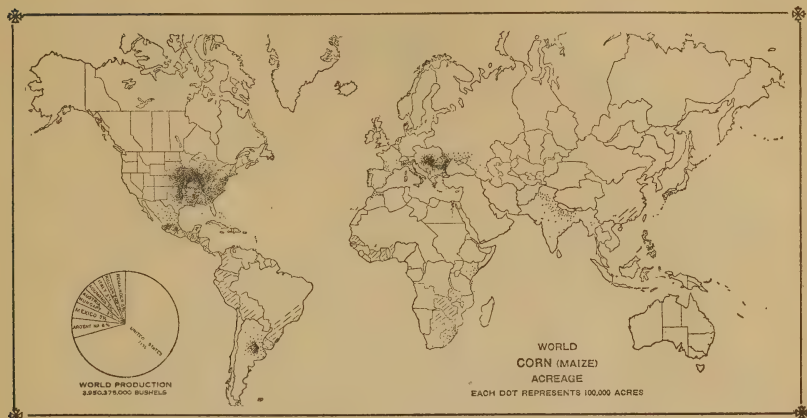


FIG. 106. Which Countries are the Corn Countries? Can You Tell From This Map Whether the United States Produces Enough Corn For her own use? Does She? <sup>1</sup>

FIG. 114. Where the Cattle of the World Are Raised <sup>2</sup>

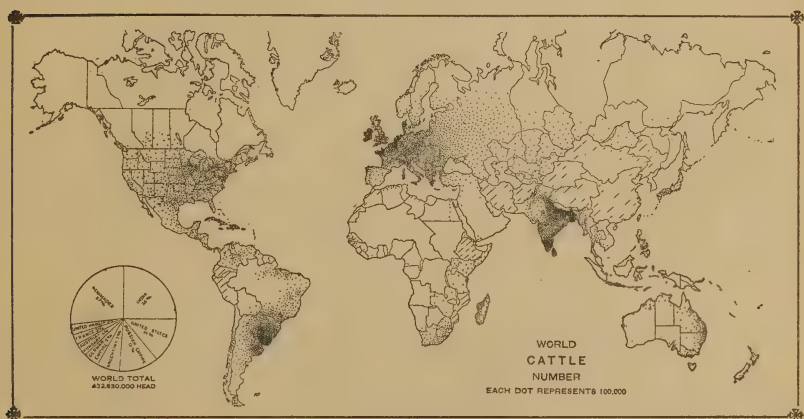


FIG. 107. Which Countries are the Great Cattle Raising Countries? Can You Tell From This Map Whether the United States Produces Enough Cattle for her own use? Does She? <sup>1</sup>

<sup>1</sup> Finch and Baker: *Geography of the World's Agriculture*, U. S. Department of Agriculture.



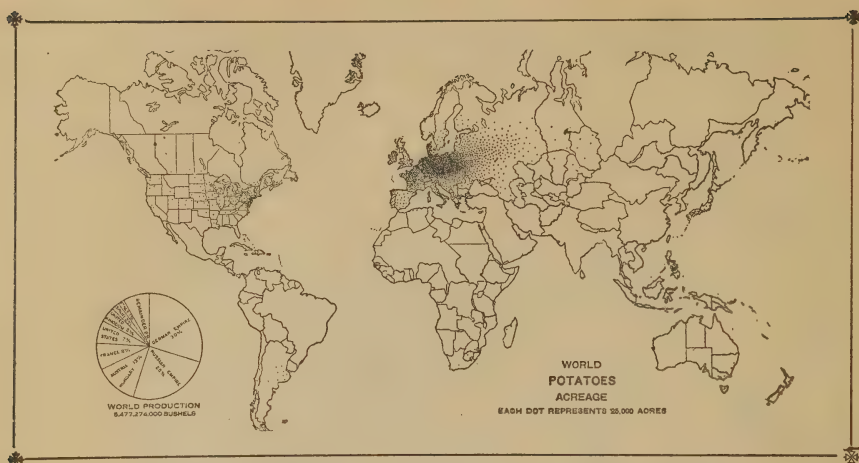


FIG. 108. Which are the chief Potato raising countries? Does the United States raise many potatoes? Does she produce what she needs? Can you tell from the map? <sup>1</sup>

HAVE YOU THE FACTS YET TO TELL WHETHER THE UNITED STATES PRODUCES HER NECESSARY FOODS?

THERE IS A THIRD WAY TO STUDY AMERICA'S DEPENDENCE ON OTHER COUNTRIES. THAT IS TO STUDY HER "EXPORTS" AND THE "IMPORTS"

Do you know now what *exports* and *imports* are?

"Exports" means articles that the manufacturers and business men of the United States sell to other countries.

So anything that we produce such as flour, hides, shoes, cotton, cloth, iron, steel rails, etc., and ship to other countries, is called an "export." Anything that we take in to the United States from any other country is called an "import."

CAN WE GET ALONG INDEPENDENTLY OF EUROPE

### 1. Two Pictures of the American farmer

"There are two pictures of the farmer.

"He has turned his back, in one of them, upon the whole scene in Europe. Arms folded. From the tilt of his hat you can see 'America is good enough for me—I don't want to hear about your new fangled continent. Don't interrupt me while I think.'

<sup>1</sup> Finch & Baker: *Geography of the World's Agriculture*, U. S. Department of Agriculture.

"That is one picture. In the other there's a megaphone. It is pointed straight at Europe. This same farmer has it at his lips, 'Hey! how about it?' he is shouting. 'What's the matter over there? Why don't you buy some of our wheat?'"

"Put a few years back on the calendar, and the first picture looks about the way it ought to look. Europe, in the first days after the war's end, seemed a good place to forget. City people might retain their interest if they chose. Not the man out on the farm. Europe might have fifty problems. Let her settle them herself.

"What was missing in this calculation, was a real sense of facts. European politics might be taboo. Not so, European markets! While the farmers cared least for all things European, they needed Europe most."<sup>1</sup>

American farmers *depend on Europe* more than do the manufacturers and merchants.

Depend on Europe for what? Farming machinery? For food?

No, of course not. America produces these herself. Her farmers depend on Europe to buy their wheat and other farm products. As things go now if Europe does not buy, our farmers can not make more than a bare living.

The reason is this. Each year American farmers produce more food than the American people need. This extra food—wheat, corn, rye, cattle for example—is sold to buyers in other countries.

The amount sold to foreign countries has become huge. Here are the figures for the year 1921:

#### HOW THE FARMERS OF THE UNITED STATES TRADE WITH THE BUSINESS MEN OF OTHER COUNTRIES

Value in Dollars of Foodstuffs Exported and Imported in 1921

	Exported	Imported
Wheat -----	689,813,094	97,766,750
Corn -----	60,030,717	6,947,385
Rice -----	19,313,001	6,279,605
Rye -----	92,734,569	
Total Foodstuffs-----	1,071,866,449	134,112,144

Over a billion dollars worth of food sold to other countries in one year! It is the profit on this billion dollars of trade that helps to make our farmers prosperous.

"For the farmers, after all, are the greatest people in the country when it comes to foreign trade—however little they may think about it between seasons. Compare the farms and factories. The latter can do fairly well at home; only three per cent of what they produce must seek markets overseas. But for the farms it is another story. Even before the war fifteen per cent

<sup>1</sup> Merz, Charles: What Europe Means to the American Farmer, *Our World*, October, 1923; New York, p. 18.

of all that the farms produced was shipped abroad—and chiefly to the ports of Europe. That fifteen per cent was the surplus over our domestic needs. And frequently it happened that the surplus set the price for the entire crop.

"People who want America to keep away from Europe and her troubles forgot all that. They seemed to think that foreign trade for farmers started with the War—that we could shift back gently to a pre-war state in which our wheat and cattle stayed at home. No such state has ever once existed, since our country came of age. Even ten years before the War was thought of, a good quarter of our wheat was being shipped abroad."<sup>1</sup>

Even in the years 1910 to 1914—before the war—we shipped to other countries \$421,000,000 of food. Three-quarters of this went to Europe.

And the War simply made Europe depend on us for food all the more!

Before 1914, Russia, Roumania and Bulgaria produced tens of millions of bushels of wheat and oats and corn, for Germany, England, Austria and other parts of western Europe. When the war came farming in these countries slumped off.

What happened? The farmer in America began to plant more grain.

"We had 46 million acres in wheat before the War; the figure jumped to 60. We had 101 million sown in corn; we raised it to 116. Eight million more in oats; that acreage nearly doubled."

What do you think happened then to the amount of food exported—that is food sold to other countries?

It increased after 1914, at astonishing rates!

The next table tells the story for the seventeen years following 1904.

Value of Foodstuffs Exported by the United States	
Year	
1904	\$444 millions
1905	401 "
1906	525 "
1907	513 "
1908	522 "
1909	438 "
1910	369 "
1911	385 "
1912	419 "
1913	503 "
1914	431 "
1915	961 "
1916	881 "
1917	1269 "
1918	1529 "
1919	2503 "
1920	2141 "
1921	1795 "

Each year for ten years from 1904 to 1914, our farmers sold almost exactly the same amount of food abroad—from 400 to 500 million dollars worth. Matters of foreign trade were running along evenly. Then, out of a clear, peaceful sky came the threat of a war which engulfed all Europe.

What happened to the United States' exports?

Food poured across the Atlantic in perfectly astonishing amounts. 961 million in 1915, 1269 million in 1917. Even in the year following the end of the War, 1919—2503 millions.

Then our food exports began to decline.

And they have kept declining—so much so that American farmers, Cabinet members, Senators and Editors are worried about the whole matter. They say "We have slid halfway to pre-war levels; we shall slide the other half. And meantime, because production costs have been mounting to the skies, those same pre-war levels will no longer turn a profit. Bad enough today, the situation will be worse.

"For Europe neither needs nor can afford to take our surplus farm production. 'Foreign demand for American foodstuffs during the current marketing season will apparently not be as great as it was a year ago,' asserts a committee of experts assembled by the Department of Agriculture. Two reasons. 'First, European food production is somewhat larger than last year, due principally to much more favorable crop conditions this year than last—while there is no apparent decline in the output of the producing regions that compete with the United States for the European market.

"Second, Europe's purchasing power this year is likely to be somewhat smaller. . . . European earnings from shipping and other services show little improvement, while credits extended to European countries are much below those of a year ago.'

"A score of well-known bankers and production men agree in this report: Mr. B. M. Anderson, of the Chase National Bank; Mr. Carl Snyder of the Federal Reserve; Mr. H. W. Morrhouse, of the American Farm Bureau Federation. The situation, as they see it, does not warrant optimism. . . . Failing markets—may force the selling of our wheat at less than cost.

"Thus two schools of prophets disagree. One foresees hard times. The other plucks up courage. But neither has the slightest doubt about the central factors in the situation.

*"Europe is a necessary market for our surplus farm production.*

*"Only a Europe prosperous and stable can afford to take our crops.*

"As Senator Capper puts it: 'We have come to recognize that economic distress in Europe means the absence of prosperity in many quarters of the United States. As long as the reparations question is unsettled, and as long as budgets are unbalanced and currencies depreciated, the rehabilitation



of Europe is impossible and our own prosperity will lag. The economic life of the world is interrelated, and what happens in one country affects in a greater or less degree conditions in another.' . . .

"The farms are coming to this opinion, too. Read their journals, if you look for proof. For in the long run there is no better thermometer of opinion than these farm papers with their giant circulations: cautious, slow to change, respected with a friendly awe unlike the cynicism of the city dweller for his morning paper. It is a curious comment on the reporting of what we call 'opinion' in this country, that the viewpoints of these rural papers are so seldom quoted in the city press.

"Try one or two of them yourself, and the results are likely to be interesting. There is *Successful Farming*, for example. Its circulation runs well above eight hundred thousand. Does it advocate what many of us in the cities might expect—a farmer's policy of Splendid Isolation? This is what it says:

"No class of people in the United States is more interested in or vitally concerned with the destinies of Europe and her economic well-being than the farmers. It is to the great consuming masses of Europe that the farmers of the United States send a large portion of their agricultural products. It is the working man of Europe and his purchasing power that vitally affect the market for our surplus.

"'Little America' and 'economic isolation' are terms that rather aptly describe the theories of those who would, as China did centuries ago when she built her famous wall around her empire, cut the United States off from the balance of the world and work to make us a self-contained nation. That is their idea of economic efficiency. They would produce in this country all that we consume and would not have the nation strain itself to produce for trading with other countries—for export. Such a policy, of course, would be suicidal to agriculture and to industry alike.'"<sup>1</sup>

WHAT DO YOU THINK NOW? DOES THE UNITED STATES DEPEND  
ON OTHER PARTS OF THE WORLD?

---

THUS FAR WE HAVE CONSIDERED ONLY FOOD. DOES AMERICA  
DEPEND ON OTHER PARTS OF THE WORLD FOR  
RAW MATERIALS

#### I. DOES THE UNITED STATES DEPEND ON OTHERS FOR COAL?

Turn back to Fig. 55. You can answer the question from the facts shown there.

---

<sup>1</sup> Ibid; pp. 21-24, pp. 24-26.

## 2. DOES THE UNITED STATES DEPEND ON OTHERS FOR IRON?

That question too you have already studied. To review the matter—it is so very important the figure is given again.

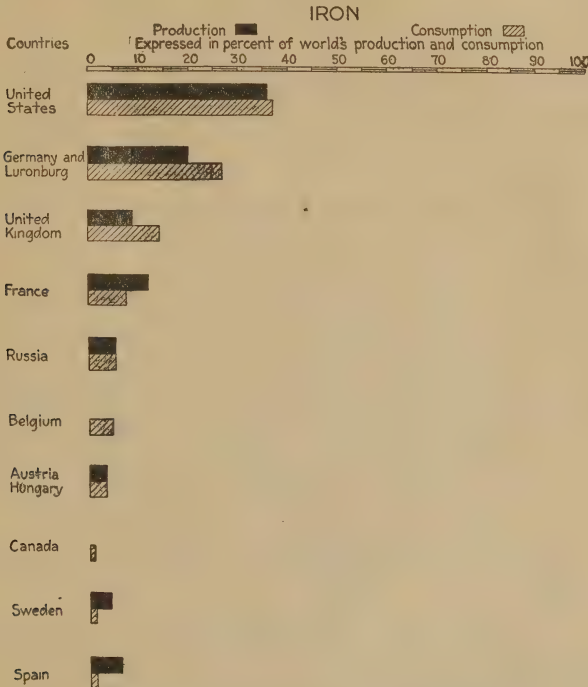


FIG. 109. Who Produces the World's Iron?  
Does the United States have to import much iron?

## 3. "RUBBER—NECESSITY FROM ABROAD"

"Statesmen who decide that the rest of the world can go to glory, while our own country speeds along in splendid isolation, are reckoning without certain basic raw materials and one of those materials is *rubber*.

"Rubber is commonplace enough. Just a bounce, and not much more. But what would any modern nation be without it! Imagine that suddenly one day at twelve o'clock all rubber vanished from these United States before anyone has time to try to work out a substitute for it. . . .

"No automobiles appear upon the streets; for they have lost their tires and innumerable other parts. Trains can't run, because they couldn't stop; they have no air-brakes. Fire is sweeping Portland, Maine; the city has no fire hose to fight it. There are five hundred tooth-aches in New York—and not one hotwater bag to stop them. Power companies are crippled, telephones are silent; electric lights are out of order, and half of

industry is stranded; insulation on electric wires has disappeared. No cable news from Europe, for insulation on cable lines has also vanished. No baseball in the parks, the balls refuse to bounce. No storage batteries, elastic bands or rubber heels; no overshoes, erasers, or suspenders. At a hundred thousand points, some trivial, some paramount, we should suffer inconvenience, hardship, peril.

"Nothing of this sort will happen, obviously. But what we have imagined suggests how many of the conveniences and necessities of modern life depend on rubber. And here is one essential fact for those who talk of American isolation:

"Annually, the United States purchases and manufactures into finished product 70 per cent of the world's supply of rubber. And not more than one per cent of that supply is produced under our own flag.

"Rubber doesn't grow conveniently next door. It is a product of the tropics, and the territory favorable to its growth is limited to a sun-blistered belt extending some five hundred miles on either side of the Equator. *Three-fifths of the whole world's supply comes from the British Malay States, far off at the southeastern tip of Asia.* (Find the Malay States in the wall map of Asia). And the degree to which trade is closely interwoven, the world over—the dependence of American markets upon crop movements in the farthest corners of the earth—is amply illustrated by a series of adventures which has split the importers of rubber into two opposing camps in recent months.

"Malay, for all its remoteness from the motor-driven West, shared in the same business slump that followed on the heels of war. The price of rubber, which had been seventy cents a pound in December, 1919, fell to 16 cents by June, 1921. Cost of production outstripped selling prices. A number of rubber companies went bankrupt. The Rubber Growers' Association (British landlords in Malay) tried artificial respiration. Prices rallied somewhat. Then came the measure which has caused so much commotion: the 'restriction program' worked out by a group of rubber estate owners and government officials, known as the Stevenson Committee, appointed by the Government to propose a plan.

"This program, put into effect last November, places no limit on production but definitely curtails the amount of rubber to be shipped abroad. The year 1919 is taken as a standard. And each grower is allowed to export only a fixed percentage of his quota. Above that he must pay a tax so heavy as to be prohibitive. The aim, obviously, is one with which we are familiar nearer home; an attempt to teeter-totter on the law of supply and demand, to raise prices by restricting output.

"Here we have an illustration of the manner in which far-flung corners of the world act as a single market. No country on the face of the globe is farther off from us than Malay. No country is more a blank. Not

one American in ten thousand can tell you the color, religion, language, or costume of the people of the Malay Peninsula. But a cycle of depression in America threw an army of Malay rubber tappers out of work. And the restrictive legislation of the Malay Peninsula came back shortly to us on the rebound.<sup>1</sup>

"We cannot dodge this homely fact:

"British finance controls 80 per cent of the production of plantation rubber in the world. American manufacturers take 70 per cent of that supply from year to year."<sup>2</sup>

#### CAN THE UNITED STATES PRODUCE RUBBER WITHIN HER OWN TERRITORY?

##### Some American Manufacturers Propose to Try to Produce Rubber in the Philippine Islands

You have read the story of England's empire, of France's empire, and of how Germany tried to build up an empire. The United States, too, controls land outside her original continental boundaries. Is it correct to say that she is building up an empire?

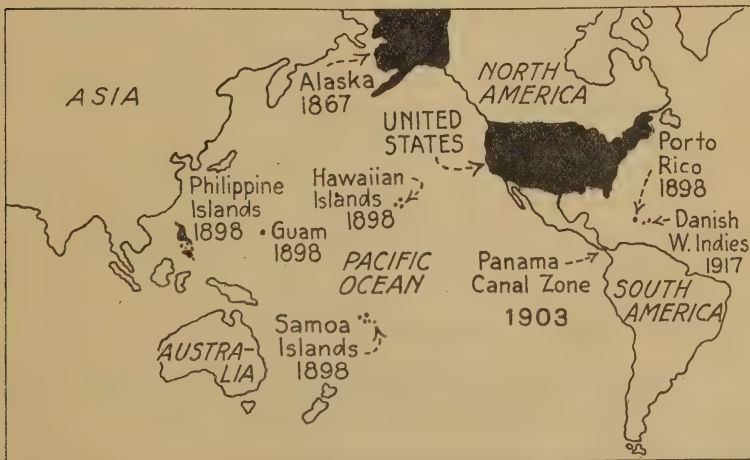


FIG. 110. This Map Shows Some of the World Possessions of the United States

Among the most important territories of which the United States still holds possession in remote parts of the world are the Philippine Islands.

<sup>1</sup> Merz, Charles: "Rubber—A Necessity from Abroad"; *Our World*, September, 1923; New York, pp. 40-42.

<sup>2</sup> *Ibid*; p. 47.



We shall read later the story of how we came to take these islands from Spain.

Recently some of our rubber manufacturers, not wanting to be dependent on England's Malay colonies for the raw rubber have proposed to grow rubber in the nearby Philippines.

Notice from the map of Fig. 91 that the Philippines are in the same and south of the Philippines on Fig. 91. Look up the two regions in a wall tropical climate as the Malay states. (The Malay states are located west map).

American Rubber manufacturers like Mr. Harvey S. Firestone, President of the Firestone Rubber Company, are very enthusiastic about having the United States grow its own rubber.

"The fact of the matter is' he says, 'that the Philippines offers exceptional opportunities for growing rubber. This statement is substantiated by Government officials who have made a close study of the situation, and by others seeking the proper development of the islands.

"The growing of rubber in the Philippines is no longer an experiment. Nearly 100,000 trees are today being tapped on Basilian Island, and several hundred thousand more trees will soon begin to yield. There are about 200,000 *Castilloa* rubber trees growing wild in Mindanao. The Augusan Valley of Minanao, a vast fertile area of 4,000 square miles, offers inducements that are immeasurable for the growing of rubber. With certain changes in the land and labor laws, the Philippines will be a grand garden spot for the growth of rubber promising to excel the Malay peninsula and other regions now prominent in the industry.

"South America, the original home of rubber, also offers opportunities that should not be overlooked. I have opened an office in Washington for the gathering of data and information upon various new sources of supply and have received official and semiofficial assurances of cooperation, and the best guarantees of protection of all the governments of South and Central America where rubber growing possibilities exist.

"What is needed to bring about this great transformation is capital, and I urgently appeal to America to raise that capital so that this country eventually will be free from the foreign grip now held on the production of a commodity of vital importance to the public.'

"The rubber situation was brought by the efforts of Mr. Firestone to the attention of our Government and Congress. An investigation of new sources was suggested by the Departments of Commerce and Agriculture and Congress appropriated \$500,000 for the purpose. The investigation is already under way, a party of nine having set out for South America on an extensive exploration trip up the Amazon River and its tributaries.<sup>1</sup>

<sup>1</sup> Ibid; pp. 44-46.

Other American manufactures are opposed to having the United States produce its own rubber. Read what Mr. B. J. Work, President of the Goodrich Rubber Company, says about it:

"The United States' says Mr. Work, 'needs the rubber grown in the English colonies and will continue to need it in increasing quantities. It can afford to pay a fair price and thus stimulate further planting to take care of future requirements. . . .

"Rubber has become a natural product of the British colonies . . . in the tropics. We should be thankful that they had the foresight and courage to create the present supply rather than find fault with them for seeking to make their investments profitable. A prevailing market price for rubber too much above or too much below its economic value would be disastrous for growers and manufacturers alike. . . .

"It takes courage to invest in rubber planting,' Mr. Work declared, 'as a number of years must elapse before there is any return on the money.

"A rubber tree must be at least five years old before it is tapped, and for the next two years the yield is comparatively small. Add to this the year required to clear and prepare the soil, and we find eight years have elapsed before a return may be expected on the investment. During this period money is going in and none coming out; so there is constant interest expense which must be charged up as part of the investment.

"Investments in tropical countries, at best, are precarious and only tempting when large returns seem probable. At the time of the 'rubber boom' the market price of crude rubber was very high and plantations were making enormous profits. This increased planting on a large scale, with the result that when this acreage came into bearing it produced more rubber than the world could absorb.' " <sup>1</sup>

At the Present Time is the United States Dependent on Other  
Parts of the World For Rubber?

#### 4. THE WHOLE INDUSTRIAL WORLD DEPENDS ON OIL

DOES THE UNITED STATES DEPEND ON OTHER PARTS OF THE WORLD  
FOR OIL? WILL SHE IN THE NEAR FUTURE?

"Oil, for those of us who are neither statesmen nor princes of petroleum, probably means three things: somewhat in this order—

"First, like buried gold or sunken treasure, it suggests vast wealth acquired overnight. We read of fortunes gushing out in barrels, for those who called the lucky turn; in fact, it is a rare investor who has never stood in line, at some period in his life, attempting to call the lucky turn himself.

<sup>1</sup> Ibid; p. 44.

"Second, oil is something that needs to be bought almost as regularly as bread and butter—used to lubricate lawn-mowers and water-pumps, stoke furnaces, burn—in the form of gasoline—in motor cars.

"Third, it is a 'natural resource' and one we have possessed abundantly; another evidence, we have felt till recently, that when the world was built an all-wise Providence took special care of that portion which would one day bear the name America.

"Lately, however, we have heard disturbing rumors. It is true, the experts tell us, that we produce within our own frontiers well above sixty per cent of the world's supply of oil. Last year, for instance, 550 million barrels in a world total of 850 million. But for years we have been prodigally wasteful in our methods of production. On an average, less than twenty-five per cent of the oil underground has never got into the pipe lines. And today the demand for gasoline is increasing so rapidly that we may face continually higher prices, and perhaps an actual shortage. Our petroleum supply is not inexhaustible. And meantime we are discovering new ways to make it work. Ship after ship on the high seas is being changed from a coal to an oil burner. Land transportation is increasingly dependent on the same fuel.

"Already we are importing heavily to meet expanding needs. Ten years ago the value of petroleum products brought into the country was \$1,800,000,000. Prices have gone up. Not enough to offset the fact that last year the figure was \$3,100,000,000.

"'The United State's own reserve of oil is not endless,' said Sir Johnson Cadman, Chairman of the Inter-Allied Petroleum Council, during War days.

"'On the contrary, one official survey after another during the past decade has definitely suggested that they are nearly exhausted. . . . Before 1930 the United States may easily be relying upon foreign sources of supply for at least half, possibly more than half, of the oil which she needs.'

"Still more recently our own Federal Trade Commission has asserted: 'The supply of crude petroleum in this country is being rapidly depleted to meet the requirements of a growing domestic consumption and foreign trade.' No man may say for certain what share of the world's supply we still have left. Twelve per cent is the conventional estimate. But this much is clear, beyond all question:

"We have wasted a large measure of our inheritance. We shall have still more imperative uses for that portion of it which remains. We shall rely in greater measure upon a supply outside our frontiers and of that supply a bare three per cent is all that is owned by Americans today."<sup>1</sup>

<sup>1</sup> Merz, Charles: "Behind the Scenes in the Oil War," *Our World*, August, 1923; New York, pp. 26-28.

# What Do You Think Now: Will the United States Soon Be Dependent on Other Countries For Oil?

## WHERE ARE THE OIL SUPPLIES OF THE WORLD?



FIG. 111. Where the Known Oil Supplies of the World Are <sup>1</sup>

### EXERCISE

Make two blackboard lists:

1. The countries which appear to have large supplies of oil.
2. The industrial countries which depend on other regions for oil.

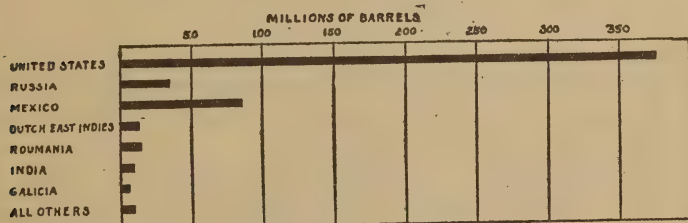


FIG. 112. Amount of Oil Produced in 1919 by Leading "Oil Countries" <sup>2</sup>

In 1919, the United States produced four times as much oil as any other country. Will she continue to do so? That is a question that is bothering American business men.

They are fearful lest the United States shall come to depend again on Great Britain for oil to run her ships just as she depends on Great Britain for rubber.

<sup>1</sup> Huntington, Ellsworth: *Principles of Human Geography*, John Wiley and Sons, New York, 1921; p. 198.

<sup>2</sup> From Gilbert & Pogue: *America's Power Resources*, The Century Co., New York, 1921; p. 92.



### British Business Men Have Circled the Globe with Stations to Supply British Ships with Oil

"We do not ring the world with oil-bunkering stations and rich seaboard fields. On the other hand, says the Federal Trade Commission, 'a British steamer leaving New York for a voyage around the world, calling at every important point of Europe, along the Mediterranean, in India, the East Indies, Japan, the Philippines, Australia, and the west coast of North America, and then returning to New York through the Panama Canal, would find oil-bunkering stations operated by a member of the Royal Dutch Shell group at every important port of call.'"<sup>1</sup>

While the United States has been producing so much oil within her own boundaries other countries have been reaching out for the known supplies of Asia and the Near East.

Again we encounter Great Britain. Of all industrial countries her business men have looked ahead farthest.

The two most important oil corporations outside the United States are either wholly or in part British: the Anglo-Persian and the Royal Dutch-Shell.

This, in spite of the fact that the United Kingdom produces almost no oil within her own borders!

How then can Britain play such a leading role in the world oil business? Simply because of her empire. "Empire" means to Britain the control of raw materials and trade in remote parts of the earth.

#### HOW INDUSTRIAL NATIONS ARE COMPETING FOR THE OIL OF BACKWARD COUNTRIES

"The Anglo-Persian Oil Company", "The Royal Dutch-Shell Company". Have you seen these names in the dispatches of your newspapers lately? You will if you scan your paper each day. They are very important to know about. Let us learn why.

"The Anglo-Persian is a British company, half-owned by the British Government. It was in 1909 that the Government went in, persuaded by its forward-looking admirals that only with modern oil-burning ships would Britannia continue to rule the waves. Outside of this share of Governmental interest, the stock of Anglo-Persian is widely scattered rather than held in the hands of a few large bankers.

"Royal Dutch Shell, on the other hand, is prominently a banker's institution. Sixty per cent of its shares are in the hands of Dutch interests: namely, the Royal Dutch Company; the remaining forty held in England by the Shell Transport and Trading Company. Both organizations have a tremendous family of subsidiaries through which they control some 90,000,000 barrels of production annually. The world over Royal Dutch-

<sup>1</sup> Ibid; p. 28.

Shell is active. It controls almost a quarter of a million acres of oil land *in the United States*, together with extensive properties in refineries, pipe lines, tank cars and marketing equipment. *It is supreme in the Dutch East Indies*. It owns important and sometimes exclusive oil properties in *Roumania, Venezuela, Trinidad and Mexico*.

Royal Dutch-Shell and Anglo-Persian, then, are the two chief competitors of American oil interests over seas."<sup>1</sup>

Already American and British business men are opposing each other in trying to control the oil in all these undeveloped countries. Governments, too, are backing up their business men because the oil is so necessary to keep ships running. We cannot take the time now to study just how this will affect the people of the different countries. Experts agree however that it will affect them very seriously. In another pamphlet we shall study the matter carefully.

What Do You Think Now: Are the Countries of The  
Industrial World Dependent on Each Other For  
Raw Materials?

We Have Now Studied How INTERDEPENDENT They Are  
With Respect to Four Raw Materials: Coal, Iron,  
Rubber and Oil. Let us Take One More  
Illustration: Cotton

# 5. AMERICA IS BOTH A PRODUCER OF COTTON AND A MANUFACTURER OF TEXTILES. DOES SHE DEPEND ON OTHER PARTS OF THE WORLD?

Fig. 49 is reprinted from Section V because it helps to answer the question of America's dependence on other countries.



FIG. 113. Per Cent of World's Cotton Produced by Each Country

<sup>1</sup> Ibid; p. 30.

Three fifths of all the cotton of the world is produced by the United States.

"Cotton is king. In the South, each year, they celebrate his coronation.

"Profits for two million farms, labor for four million people, that is what cotton means to agricultural America. You could drop ten States the size of Connecticut into the white blossoms of the South and never miss them.

"Cotton is the leading commercial crop of the United States. And annually, since the first statistics got themselves on record, we have led the world in its production. Never a steady figure, to be sure. Few crops of such importance have vacillated more. Good seasons and bad seasons chase each other in a ring. First a crop that breaks the record. Then a fall in prices. Restricted acreage, the year after, due to the fact that so many growers are small-scale production men, working always near the margin, lacking capital enough to weather through the storm. A smaller crop. Then prices up again. The market is a teeter-totter."<sup>1</sup>

Three Fifths of the World's Cotton Raised in the United States!  
Less Than Half of That Manufactured Into Goods in  
the United States!

What happens to it?

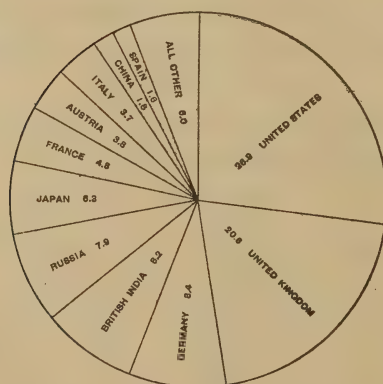


FIG. 114. Where the World's Cotton is Manufactured into Goods, Per Cent Used by Each Country

What does happen to the millions of bales of cotton that we produce which we do not manufacture?

Name the countries that buy it.

Which one is our best customer? Which one is next best?

<sup>1</sup> Merz, Charles: "What Europe Means to King Cotton," *Our World*, November, 1923; New York, p. 24.

Do you think now that our cotton growers depend much on other countries?

Here is a clipping from a recent magazine article about the matter:

"The fact of the matter is . . . we can no more get away from Europe, with our cotton, than we can ignore it with our wheat.

"Watch the newspaper headlines, if you have any doubt about how closely intertwined are cotton and the scene in Europe. 'New Prospect for Agreement in the Ruhr' declares the headlines. And the market jumps. 'Italian Ultimatum Sent to Greece.' The market falls.

"Or turn back to the tall columns of statistics that mark the records of past years. Thirteen million, fourteen million, fifteen million bales. Crops like that were fairly common in the South before the War.

"Before. Not after. We haven't had a crop like that since the year the war began. We haven't had a crop that even touched twelve million. Why? Because the slump in prices in the first year of the War hit every cotton country in the world. And despite a multitude of new demands for cotton which the War produced—airplane wings and tires, for example—no country has recovered from that body blow today.

"Europe remains the fly-wheel in world trade. A half dozen of its countries accounted for no less than 48 per cent of the world's commerce, in the year before the war. As for cotton: France, England, Germany and Italy—these four alone bought five-sixths of all we shipped abroad that year. Compare this figure with results in 1922. From five-sixths the ratio drops to a little more than half.

"Seven million bales in 1913—three million and a half last year. That margin represents the market we have lost abroad.

"No theory of our own self-sufficiency as an economic unit can get away from that. In the long run, there are two facts that stand out unmistakably:

*"First: Europe is a necessary market for a full fifty per cent of all our cotton whenever we produce a bumper crop.*

*"Second: Only Europe prosperous and stable can purchase from us on that mammoth scale.*

"That, in the last analysis, is what Europe means to the legendary monarch of the South—King Cotton."<sup>1</sup>

---

<sup>1</sup> Ibid; pp. 30-31.



### III. WE HAVE STUDIED THE EXTENT TO WHICH THE UNITED STATES IS DEPENDENT ON OTHER COUNTRIES FOR FOOD AND RAW MATERIALS

DO WE DEPEND ON THEM FOR MANUFACTURED GOODS?

#### AN IMPORTANT PROBLEM FOR YOU

To this question we are going to let you find the answer. We will supply you with facts and figures, but we want you to discover the answer yourself.

In the statistical tables at the end of this pamphlet you will find many facts. Some of them will help you to tell whether your country is dependent on other parts of the world with respect to manufactured goods.

Each pupil in your class should separately prepare a report on this question. Use any other books or magazines that you have at hand.

In the public library you can find many facts in reports of the various departments of the United States government, especially the Department of Commerce.

Use such statistical books as: (1) *The World Almanac* (New York "World"); (2) *The Statesman's Yearbook* (Macmillan Co., New York City); (3) *The Chicago Daily News Almanac*; (4) Reports like the geological Atlas of the U. S. Department of Agriculture, etc.

When the members of the class have finished the reports how would you like to have an "open-forum" argument about the question?

---

#### WE HAVE LEARNED THAT THERE ARE TWO WAYS IN WHICH OUR LIVES ARE INTERTWINED WITH THOSE OF OTHER PEOPLES

**First:** We cannot get along well without some of the things that they produce. Name several examples

**Second:** Our farmers and manufacturers can not make a living unless other countries buy from them their surplus products. Name several examples.

---

What is your answer now to our principal question:

ARE INDUSTRIAL COUNTRIES SELF-SUFFICIENT OR INTERDEPENDENT?

## BOOKS FROM WHICH YOU CAN GET ADDITIONAL INFORMATION ON THE UNITED STATES

- The Geography of Our Foreign Trade, *The National Geographic*, Vol. 41, Jan., 1922, pages 89-108.
- Huge Imports Despite the Tariff Wall, *Literary Digest*, Vol. 77, June 9, 1923, page 16. Discusses excess of imports in 1923. For the best readers.
- Keller, A. G. & Bishop, A. L.: *Commercial and Industrial Geography*, Ginn and Company, Boston, 1912. Sources of raw rubber, pages 85-91. Our wheat market, pages 158-166.
- Profit in our insular possessions, *Literary Digest*, Vol. 77, May 26, 1923, pages 80-81. Gives statistics on our trade with our island possessions.
- Smith, J. R.: *Commerce and Industry*, Henry Holt and Company, New York, 1916. Sources of raw rubber, pages 240-243. Fertilizers, pages 257-262. World commerce, pages 501-554.
- Trading our manufactures for foreign raw materials, *Literary Digest*, Vol. 76, Jan. 6, 1923, page 74. A short article giving import of pig-tin and the export of textiles, rubber goods, and leather goods.
- Why we buy more than we sell, *Literary Digest*, Vol. 77, June 2, 1923, page 20. Good graph and table on exports and imports. For the best readers.

### References On Our Trade With Latin America

- British superiority in Latin America, *Literary Digest*, Vol. 79, November 3, 1923, page 20. A very important reference.
- Dollar diplomacy in Latin America, *Literary Digest*, Vol. 78, July 28, 1923, pages 19-20. For best readers.
- North American penetration of Central America, *Review of Reviews*, Vol. 66, Aug. 1922, page 201.
- Latin American Criticism of Uncle Sam, *Literary Digest*, Vol. 77, April 28, 1923, pages 22. Shows that our trade with South America has dwindled.
- Latin American distrust of Uncle Sam, *Literary Digest*, Vol. 79, Oct. 6, 1923, pages 23-24. For best readers.
- United States and Latin America, *Current History Magazine*, *New York Times*, Vol. 18, May, 1923, pages 188-190. For the best readers.

### References On Our Trade With Europe

- American business in Germany, *Literary Digest*, Vol. 76, Feb. 3, 1923, pages 19-20. For the best readers.
- American business man on business with Russia, *Literary Digest*, Vol. 78, July 21, 1923, page 66. Describes Russian condition in a very brief article.
- American farmer and Europe, *World's Work*, Vol. 45, Dec. 1922, pages 176-180 and Jan. 1923, pages 287-290. The first article shows how European conditions effect the prosperity of the Mississippi Valley. The second article is very difficult, but the best readers may be able to handle it.
- Our foreign trade shifting away from Europe, *Literary Digest*, Vol. 75, Dec. 16, 1922, pages 72-73. Gives the percentage of our sales to Canada, South America and Asia.
- Our trade relations with Great Britain, *Review of Reviews*, Vol. 66, July, 1922; pages 89-90. For best readers.
- Shunning our best customers, *Literary Digest*, Vol. 77, April 21, 1923; page 21. Shows that the depressed condition of the farming industry is due to our decreased trade with Europe.
- What have we to do with Europe? *Literary Digest*, Vol. 76, February 17, 1923; page 72. Short article giving statistics.

## References On Our Trade With Asia

- American merchant adventures in China, *Asia Magazine*, Vol. 22, February, 1922; pages 106-112.
- How I trade across the Pacific, *World's Work*, Vol. 44, August, 1922; pages 441-448. Excellent article giving the growth of our trade with Asia.
- Our increasing trade with the East, *Literary Digest*, Vol. 72, January 14, 1922; page 59. Gives a table of our export trade in percentages.
- Slow Americans, *Asia*, Vol. 22, March, 1922; pages 186-192.
- Why Uncle Sam riles Australia, *Literary Digest*, Vol. 78, August 11, 1923; page 22. Shows that the balance of trade is against Australia.
- Our trade with the Turk, *Literary Digest*, Vol. 75, November 18, 1922; page 80. A short article which shows the trade balance is against the United States.

## References On Life In the Possessions Of The United States

- America's South Sea Soldiers (Samoa), *The National Geographic*, Vol. 36, September, 1919; pages 268-274.
- The Camel of the Frozen Desert, *The National Geographic*, Vol. 36, December, 1919; pages 539-556.
- Cuba: The sugar mill of the Antilles, *The National Geographic*, Vol. 38, July, 1920; pages 1-33.
- Haiti: The home of the twin republics, *The National Geographic*, Vol. 38, December, 1920; pages 483.
- A little known marvel of the Western Hemisphere (Haiti), *The National Geographic*, Vol. 38, December, 1920; pages 469-482.
- The haunts of the Carribean Corsairs, *The National Geographic*, Vol. 41, February, 1922; pages 146-187.

## SECTION XIII

### WE MUST BEGIN NOW THE STUDY OF ANOTHER TOPIC THAN INDUSTRIES AND TRADE IN THE GREAT INDUSTRIAL NATIONS

IN THE NEXT PAMPHLET WE SHALL STUDY ABOUT THE INDUSTRIES  
AND RESOURCES OF THE CHANGING AGRICULTURAL NATIONS

AT THIS TIME YOU NEED A SUMMARY OF THE WHOLE PAMPHLET

Before taking up the next pamphlet you should try to bring together the chief points you have studied about the industries, resources, and cities of the industrial nations.

We think the important points are represented by the following questions. Can you talk clearly about them?

### IMPORTANT QUESTIONS WHICH YOU SHOULD BE ABLE TO DISCUSS CONCERNING THE TRADE AND INDUSTRIES OF THE GREAT INDUSTRIAL NATIONS

1. *When the industrial revolution took place in the great industrial nations, and how completely industrialized these nations are.*  
In which country did the industrial revolution first take place? How much later did it develop in other countries? Which are the most completely industrialized countries?
2. *The causes of the industrial revolution.* Why has the industrial revolution taken place in some countries and not in others? What has the location of the country to do with the industrial revolution? What does the possession of coal and iron have to do with it? What does the invention of machines have to do with it?
3. *The changes which the industrial revolution has made.* How has it changed the place in which men work? How has it changed their way of working? How has it affected their independence? How has it changed methods of production? How has it changed the amount of goods produced? How has it affected the general population? The city population? The farm population? How has it changed the methods of transportation both by water and by land?



4. *The ways in which modern nations depend upon the rest of the world.* What kinds of products must industrial nations get from other parts of the world? What kind of products do they ship to other parts of the world? What connection does the building up of empires have with interdependence? What happens when the trade connections of a nation with the rest of the world are broken off?

Now take the *Final Test on Industries and Trade Which Bind Nations Together*, and then begin at once on Pamphlet No. 4, Part II, *The Changing Agricultural Nations*.

## A SUGGESTED SCHEDULE OF LESSONS

Lesson  
No.

- |                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1, 2, 3, 4.                       | Section I. <i>An Old World Which is Becoming a New World.</i><br>This Section might be done in one of two ways: First, have the pupils read rapidly through the entire unit; following that do the map location work; the children could do the map work on each region described as they read the episodes. We will ask you in a question blank to be sent you later, which method you tried out and the results obtained. The location work of the continent test and the estimate of the world's population might well be done following the reading of the episodes. In class discussion bring out only the big ideas. <i>Do not analyze the episodes.</i> |
| 5, 6, 7, 8.                       | Section II. <i>The Narrow World of the Middle Ages.</i><br>Have the children take the test at the completion of the reading. The exercises and the test should serve as a guide to the class discussion. The faster workers will have time for supplementary readings so that half of one class hour might be given for the report on these.                                                                                                                                                                                                                                                                                                                   |
| 9, 10, 11.<br>12.                 | Section III. <i>The Industrial Revolution in England.</i><br>The two exercises: size of and population of England, should be done in two class exercises. The informal debate suggested on page 95 should not take up more than a half period.                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 13, 14, 15.                       | Section IV. <i>The Changes Made by the Industrial Revolution.</i><br>In the first class hour the group should begin the Map Exercise suggested on page 112; the second hour might be spent in finishing the reading and taking the test; in the third exercise might be discussed the six great changes which were made by the Industrial Revolution.                                                                                                                                                                                                                                                                                                          |
| 16, 17, 18.                       | Section V. <i>How England's Trade Grew.</i><br>With one class exercise for study, and another for the Map Exercise on page 15 and the taking of the test, the third class meeting would be free for discussion.                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 19, 20, 21,<br>22, 23, 24.        | Section VI. <i>England Built Up a World Empire.</i><br>The map work as given on pages 141-142, 163 and 171 should be done as the reader reaches them in the course of his study. The study suggested on page 172 should be reported after the general discussion of the section. The test might well serve as a guide to that discussion.                                                                                                                                                                                                                                                                                                                      |
| 25, 26, 27,<br>28, 29, 30,<br>31, | Section VII. <i>France The World's Second Empire.</i><br>The exercise, page 181, will take a class hour. The making of a bar graph and working out the comparison population and size, both exercises page 182, will take the second class hour. The fourth problem, pages 182-184 will be class discussion for a period, and the map exercise showing Europe's position in relation to Asia, pages 184-185, will take the fourth class hour. The exercises, pages 185-186, distances on the five largest continents and the harbors of Europe will take the fifth and sixth exercises. The seventh class hour should finish exercises, page 187.              |
| 32, 33, 34.                       | Section VIII. <i>How France Became Both Farmer and Manufacturer, 1750-1850.</i><br>We have estimated the work allowing two exercises for study, test and discussion and one exercise for the graph making.                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

- 35, 36, 37,  
38. Section IX. *How, After 1850, France Became One of the World's Leading Industrial Nations.*  
The two Map Exercises should be done within two class periods. This leaves one period for study with the test and one for discussion.
- 39, 40, 41,  
42, 43, 44. Section X. *France Built Up the Second Largest Empire in the World, 1850-1919.*  
We have planned a period for study, two for map making, one for the giving of reports on how the people live in the Colonies of France; and two for the test and general discussion.
- 45, 46, 47,  
48, 49, 50,  
51, 52, 53. Section XI. *Germany.*  
This section includes four important map exercises for which we have allowed five class periods. For study and taking the test two class exercises have been allowed and for general discussion two more.
- 54, 55, 56,  
57. Section XII. *United States.*  
In giving a week's work to this section, we have allowed one for study, one for exercises, one for general discussion and one for supplementary reports from the faster workers.
- 58, 59.  
60. For the discussion of "Important Questions."  
For the Final Test.

## APPENDIX

### REFERENCE TABLES

#### I. THE SIZE OF THE EARTH

Diameter of earth at Equator (miles).....	7,926
Distance around the earth at Equator (miles).....	24,900
Land area (square miles).....	56,255,000
Water area (square miles).....	140,205,000

#### II. THE SIZE AND POPULATION OF THE CONTINENTS AND PRINCIPAL COUNTRIES

	Area in Square Miles	Population
<b>AFRICA.</b> . . . . .	11,600,000	142,000,000
Belgian		
Belgian Congo. . . . .	929,000	15,500,000
British		
Sudan . . . . .	1,014,000	3,400,000
British East Africa.....	723,300	13,837,000
Egypt. . . . .	350,000	12,751,000
Kamerun. . . . .	191,100	2,540,000
Rhodesia. . . . .	440,000	1,699,000
Union of South Africa....	473,200	5,973,000
French		
Algeria. . . . .	222,200	5,564,000
French Equatorial Africa.	672,000	9,000,000
French West Africa and		
Sahara. . . . .	2,807,000	12,720,000
Madagascar. . . . .	228,000	3,545,000
Morocco. . . . .	221,000	5,400,000
Tunis. . . . .	50,000	1,940,000
Italian		
Libia. . . . .	406,000	523,000
Portugese		
Mozambique. . . . .	428,100	3,012,000
Spanish . . . . .		
Spanish Morocco. . . . .	11,000	600,000
Independent Countries		
Abyssinia. . . . .	350,000	8,000,000
Liberia. . . . .	40,000	2,000,000
<b>ASIA.</b> . . . . .	17,000,000	885,000,000
Afghanistan. . . . .	245,000	6,381,000
Arabian Peninsula. . . . .	986,000	4,850,000
Armenia. . . . .	75,600	4,028,000
Ceylon. . . . .	25,000	4,686,000
Chinese Republic. . . . .	4,277,100	327,910,000
Dutch East Indies.....	963,900	48,040,000
Indian Empire. . . . .	1,802,600	315,156,000
Japanese Empire. . . . .	260,700	77,005,000
Malay Peninsula. . . . .	503,600	28,967,000
Mesopotamia. . . . .	143,300	2,849,000
Palestine. . . . .	9,000	648,000
Persia. . . . .	628,000	9,500,000
Siberia. . . . .	4,831,900	10,378,000
Syria. . . . .	106,700	3,134,000
Turkestan. . . . .	420,800	6,634,000
Turkey in Asia.....	97,800	3,719,000



	Area in Square Miles	Population
<b>AUSTRALIA</b> . . . . .	2,975,000	5,141,000
<b>EUROPE</b> . . . . .	3,900,00	455,000,000
Albania. . . . .	11,000	825,000
Austria. . . . .	32,100	6,412,000
Belgium. . . . .	11,800	7,762,000
British Isles. . . . .	121,700	45,475,000
England. . . . .	50,900	34,045,000
Wales. . . . .	7,500	2,025,000
Scotland. . . . .	30,400	4,866,000
Ireland. . . . .	32,600	4,390,000
Bulgaria. . . . .	42,000	4,500,000
Czecho-Slovakia. . . . .	56,300	13,500,000
Denmark. . . . .	17,100	3,171,000
Esthonia. . . . .	23,200	1,750,000
Finland. . . . .	126,000	3,277,000
France. . . . .	212,700	41,476,000
Germany. . . . .	171,900	55,086,000
Greece. . . . .	56,000	5,500,000
Hungary. . . . .	36,600	8,800,000
Italy. . . . .	110,600	36,120,000
Latvia. . . . .	25,000	1,250,000
Jugo-Slavia. . . . .	177,200	14,798,000
Netherlands. . . . .	13,200	6,779,000
Norway. . . . .	125,000	2,632,000
Poland. . . . .	141,900	30,072,000
Portugal. . . . .	35,500	5,953,000
Rumania. . . . .	122,300	17,393,000
Russia in Europe. . . . .	1,869,300	131,420,000
Spain. . . . .	194,800	20,720,000
Sweden. . . . .	173,000	5,814,000
Switzerland. . . . .	16,000	3,937,000
Turkey in Europe. . . . .	2,200	1,281,000
<b>NORTH AMERICA</b> . . . . .	9,455,700	145,000,000
Alaska. . . . .	590,900	55,000
Canada. . . . .	3,769,400	8,428,000
Central America. . . . .	219,500	5,576,000
Greenland. . . . .	827,300	13,000
Labrador. . . . .	120,000	4,000
Mexico. . . . .	767,200	15,116,000
Newfoundland. . . . .	42,700	255,000
United States. . . . .	3,027,000	105,709,000
West Indies. . . . .	91,800	9,974,000
<b>SOUTH AMERICA</b> . . . . .	7,222,000	62,630,000
Argentina. . . . .	1,153,000	8,279,000
Bolivia. . . . .	514,000	2,890,000
Brazil. . . . .	3,276,000	30,492,000
British Guiana. . . . .	89,500	311,000
Chile. . . . .	290,000	3,946,000
Colombia. . . . .	441,000	5,420,000
Dutch Guiana. . . . .	46,000	108,000
Ecuador. . . . .	116,000	2,000,000
French Guiana. . . . .	32,000	26,000
Paraguay. . . . .	65,000	1,000,000
Peru. . . . .	722,000	4,500,000
Uruguay. . . . .	72,000	1,430,000
Venezuela. . . . .	399,000	2,225,000
Total world population (estimated) . . . . .		1,695,000,000

## III. THE LARGEST CITIES OF THE WORLD—500,000 AND OVER

Population	Population
New York, U. S. A. (1920) 5,620,048	Manchester, England (1911) 716,000
London, England (1918) 4,521,801	Naples, Italy (1915) 698,000
Paris, France (1921) 2,863,741	Hangchow, China (1918) 684,000
Chicago, U. S. A. (1920) 2,701,705	Ningpo, China 670,000
Petrograd Russia (1915) 2,318,645	Milan, Italy (1915) 663,000
Tokyo, Japan (1916) 2,244,796	Amsterdam, Netherlands (1918) 644,000
Berlin, Germany (1919) 1,897,864	Sydney, New South Wales (1911) 637,000
Vienna, Austria (1920) 1,838,708	Fuchow, China (1918) 624,000
Philadelphia, U.S.A. (1920) 1,823,779	Copenhagen, Denmark (1916) 605,000
Moscow, Russia (1913) 1,818,000	Madrid, Spain (1910) 600,000
Buenos Aires, Argentina (1918) 1,637,000	Munich, Germany (1910) 596,000
Osaka, Japan (1916) 1,460,000	Melbourne, Victoria (1911) 592,000
Hankow, China (1918) 1,443,000	Rome, Italy (1915) 591,000
Calcutta, India (1911) 1,222,000	Leipsic, Germany (1910) 590,000
Rio de Janeiro, Brazil (1910) 1,130,000	Pittsburgh, U. S. A. (1920) 588,343
Glasgow, Scotland (1911) 1,008,000	Barcelona, Spain (1910) 587,000
Constantinople, Turkey (estimate) 1,000,000	Los Angeles, U. S. A. (1920) 576,673
Peking, China (estimate) 1,000,000	Marseille, France (1911) 551,000
Shanghai, China (1918) 1,000,000	Prague, Czecho-Slovakia (estimate) 550,000
Detroit, U. S. A. (1920) 993,678	Dresden, Germany (1910) 548,000
Bombay, India (1911) 980,000	Bangkok Siam (1918) 541,000
Hamburg, Germany (1917) 973,000	Changsha, China (1918) 535,800
Warsaw, Poland (1913) 909,000	Lyon, France (1911) 524,000
Canton, China (1918) 900,000	Madras, India (1911) 520,000
Budapest, Hungary (1910) 880,000	Cologne, Germany (1910) 517,000
Birmingham, England (1911) 840,000	Breslaw, Germany (1910) 512,000
Tientsin, China (1918) 800,000	Buffalo, U. S. A. (1920) 506,775
Cleveland, U. S. A. (1920) 796,841	San Francisco, U.S.A. (1920) 506,676
Cairo, Egypt (1917) 790,000	Rotterdam, Netherlands (1918) 501,000
St. Louis, U. S. A. (1920) 772,897	Hyderabad, India (1911) 500,000
Boston, U. S. A. (1920) 748,060	Suchau, China (1918) 500,000
Liverpool, England (1911) 746,000	
Baltimore, U. S. A. (1920) 733,826	

## IV. LENGTH OF RAILROADS OF PRINCIPAL COUNTRIES

Rrs. Miles.	Rrs. Miles.
Argentina 21,935	Italy 10,290
Brazil 17,213	Japan 6,728
China 6,818	Russia 42,504
France 25,766	United Kingdom 23,734
Germany 35,677	United States 263,821

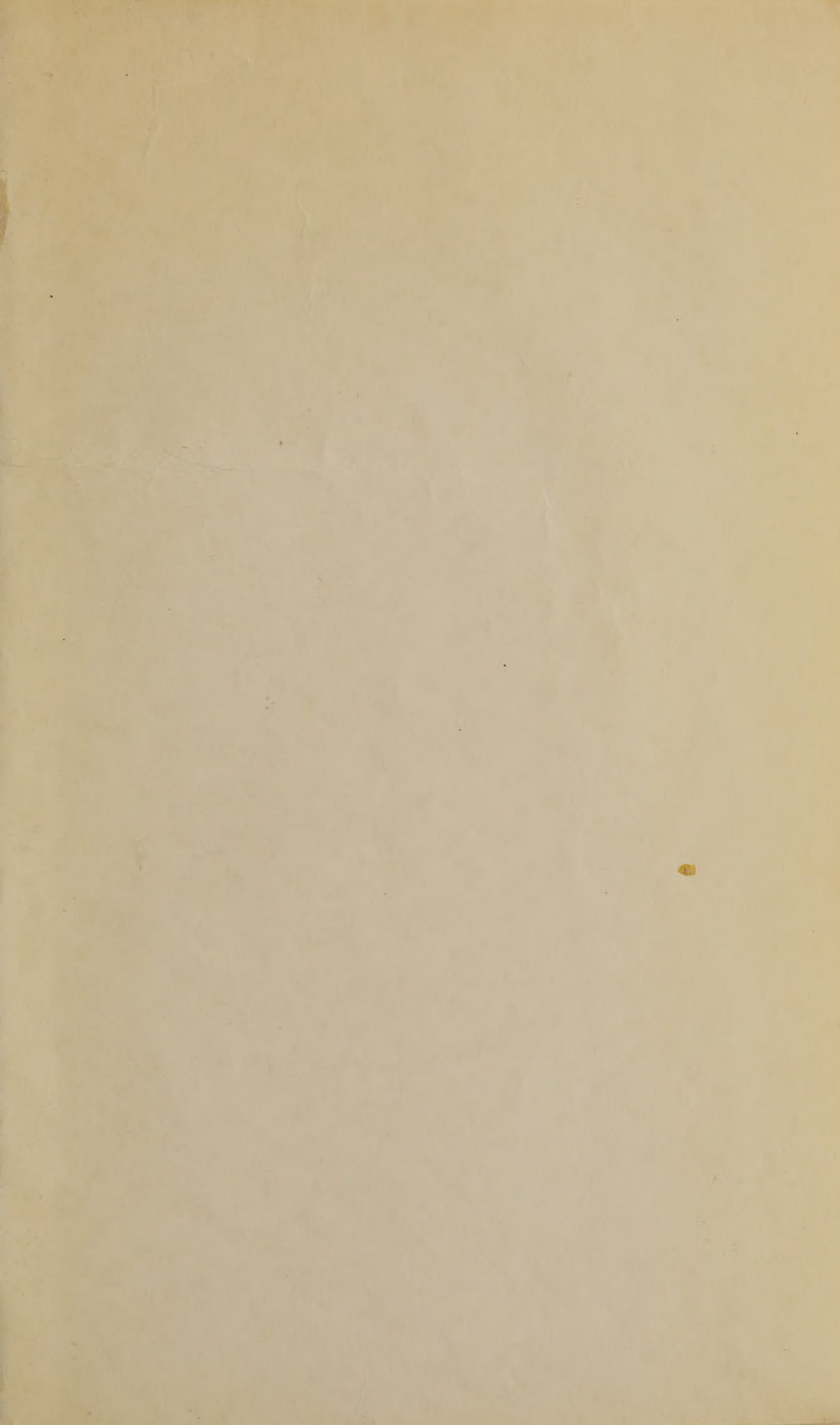
## V. IMPORTS AND EXPORTS, UNITED STATES, 1921-1922

## EXPORTS, 1921-1922

Animals .....	\$14,971,866
Animal and fish oils, fats and greases .....	124,583,002
Books, maps, pictures and other printed matter..	17,328,411
Brass and bronze.....	6,041,502
Chemicals .....	50,259,886
Coal .....	100,116,264
Copper and manufactures of .....	101,152,264
Cotton, unmanufactured.	596,373,864
Cotton, manufactures of.	122,938,127
Crude drugs, essentials, oils, dyeing and tanning materials .....	5,846,850
Dairy products .....	36,375,122
Eggs, in the shell.....	10,015,576
Explosives, ammunition, and fireworks .....	5,534,946
Fertilizers and fertilizer materials .....	17,002,528
Fibres, vegetable, manufactures thereof .....	19,015,375
Fish .....	16,846,314
Fodders .....	25,128,678
Fruits and nuts.....	66,628,364
Fur, and manufactures of	24,013,670
Glass and glass products.	8,726,846
Grains, and preparations of .....	591,295,498
Household and personal effects .....	13,304,052
Iron and steel, and manufactures of .....	181,798,042
Leather .....	41,245,311
Leather manufactures...	17,647,819
Machinery .....	245,976,381
Meats .....	131,952,791
Musical instruments ....	7,488,422
Naval stores, gums and resins .....	15,231,991
Oilseeds and vegetables oils and fats.....	13,547,878
Paper, except printed matter .....	20,668,535
Paraffin wax .....	9,005,734
Petroleum, crude .....	16,366,428
Photographic goods ....	16,917,875
Pigments, paints and varnishes .....	10,069,211
Refined, mineral oils....	304,228,443
Rubber, and manufactures of .....	31,024,044
Silk, manufactures of...	10,163,417
Soap .....	8,776,854
Sugar .....	77,447,331
Tobacco, unmanufactured	157,269,356
Tobacco, manufactures of	23,563,381
Vegetables .....	18,043,844
Vehicles .....	99,747,958
Wood, and manufactures of .....	89,113,985
Wool and hair, manufactures of .....	7,036,702

## IMPORTS, 1921-1922

Animals .....	\$5,849,527
Art works .....	22,341,098
Breadstuffs .....	28,365,516
Chemicals, drugs, dyes and medicine .....	97,480,862
Cocoa and cacao, crude.	27,348,879
Coffee .....	148,502,658
Copper, manufactures...	45,017,868
Cotton, unmanufactured.	43,957,891
Cotton, manufactured....	88,196,434
Fibres, vegetables, textile grasses, unmanufactured .....	27,831,159
Fibres, vegetables, textile grasses, manufactured .....	87,228,780
Fish .....	29,368,391
Fruits, including nuts...	89,864,888
Furs, manufactures of...	52,960,412
Hides and skins.....	78,899,020
India-rubber, gutta-percha and substitutes, crude .....	88,839,362
Iron and steel, and manufactures of .....	29,660,540
Lead, manufactures of..	3,110,734
Leather, manufactures of	22,870,830
Meat and dairy products	32,443,041
Nickel ore and matte....	51,749
Oils .....	146,768,562
Paper and manufactures of .....	85,121,318
Precious and semi-precious stones and imitations of .....	47,232,364
Seeds .....	39,896,160
Silk, unmanufactured...	307,202,888
Silk, manufacture of....	40,337,844
Spices .....	7,828,303
Spirits, malt liquors and wines .....	2,720,696
Sugar and molasses....	202,789,376
Tea .....	10,040,476
Tin, in bars, blocks or pigs .....	28,979,660
Tobacco and manufactures of .....	63,248,919
Vegetables .....	19,852,660
Wood, and manufactures of .....	127,737,366
Wool, and manufactures of .....	88,961,570





# DATE DUE

JUN 15 1991

FEB 20 1997

DEMCO 38-297

BRIGHAM YOUNG UNIVERSITY



3 1197 20594 0429



